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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)

COMBINED PRELIMINARY EXAMINATION (2020)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet A

Friday **21 August 2020** **1 h**

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. The use of calculators is **NOT** allowed.

Name : _____ ( )

Class : 6 ( )

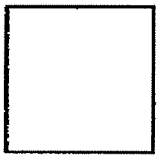
This question paper consists of 8 printed pages. (Inclusive of cover page)

Questions **1** to **10** carry 1 mark each. Questions **11** to **15** carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet (OAS). (20 marks)

1. How many ten thousands are there in 4 710 000?

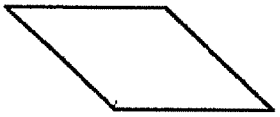
   1) 47
   2) 471
   3) 4710
   4) 47100

2. How many of the following figures have at least one line of symmetry?

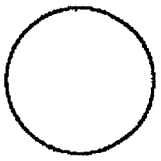


Square

Parallelogram



Rhombus



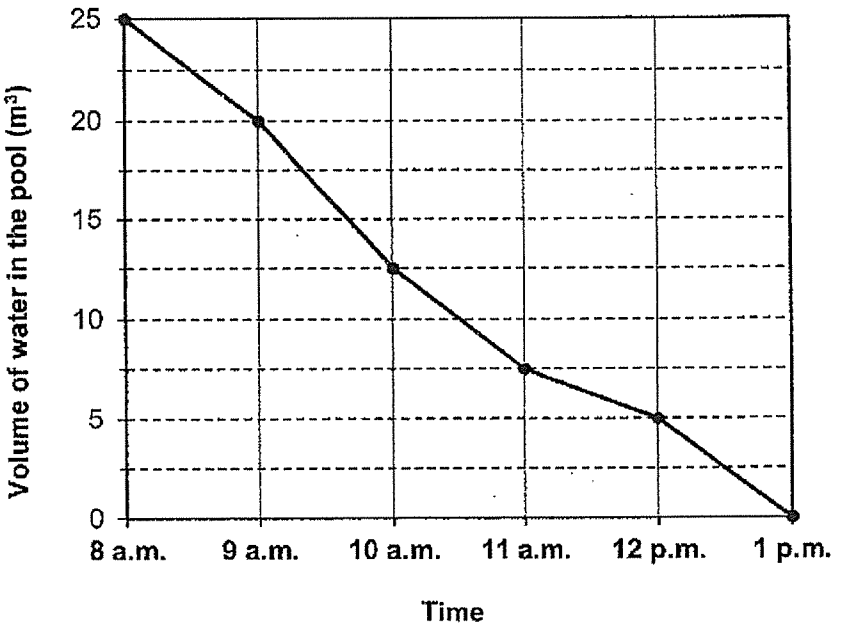
Circle

   1) 1
   2) 2
   3) 3
   4) 4

3. Express $6\frac{2}{500}$ as a decimal.

   1) 6.2
   2) 6.4
   3) 6.04
   4) 6.004

4. At 8 a.m., a swimming pool was completely filled with water. From 8 a.m. to 1 p.m., water was drained from the swimming pool. The line graph below shows the volume of water in the swimming pool from 8 a.m. to 1 p.m.



During which one-hour period was the decrease in the volume of water the greatest?

1) Between 8 a.m. and 9 a.m.
2) Between 9 a.m. and 10 a.m.
3) Between 10 a.m. and 11 a.m.
4) Between 11 a.m. and 12 p.m.

5. The table below shows the number of 'Arts Fiesta' tickets sold over a period of five days. The total number of tickets sold was 1380. What is the average number of tickets sold on Wednesday, Thursday and Friday?

Days	Tickets sold
Monday	325
Tuesday	380
Wednesday	?
Thursday	?
Friday	?

1) 205
2) 225
3) 675
4) 705

6. Isaac ran round a circular track 3 times for his training. The radius of the track was 56 m. How far did he run? (Take $\pi = \frac{22}{7}$)

1) 168 m
2) 352 m
3) 528 m
4) 1056 m

7. A tank measured 40 cm by 15 cm by 30 cm is half filled with water. Find the volume of water in the tank.

1) 9 ℓ
2) 18 ℓ
3) 9000 ℓ
4) 18000 ℓ

8. Arrange the following fractions from the smallest to the largest:

$1\frac{1}{6}$, $\frac{5}{4}$, $\frac{10}{9}$

1) $1\frac{1}{6}$, $\frac{10}{9}$, $\frac{5}{4}$

2) $\frac{5}{4}$, $\frac{10}{9}$, $1\frac{1}{6}$

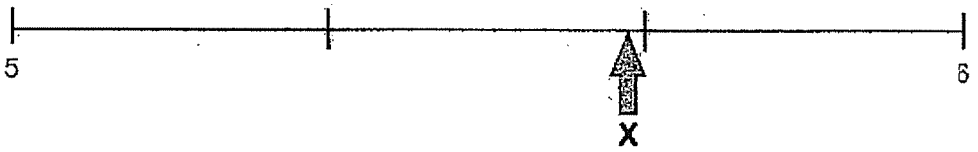
3) $\frac{5}{4}$, $1\frac{1}{6}$, $\frac{10}{9}$

4) $\frac{10}{9}$, $1\frac{1}{6}$, $\frac{5}{4}$

9. One of the angles of a trapezium is 55°. Which of the following are possible values of the remaining angles?

1) 115°, 55° and 125°
2) 115°, 55° and 65°
3) 115°, 55° and 115°
4) 115°, 65° and 125°

10. In the number line shown below, which value is closest to the reading at **X**?

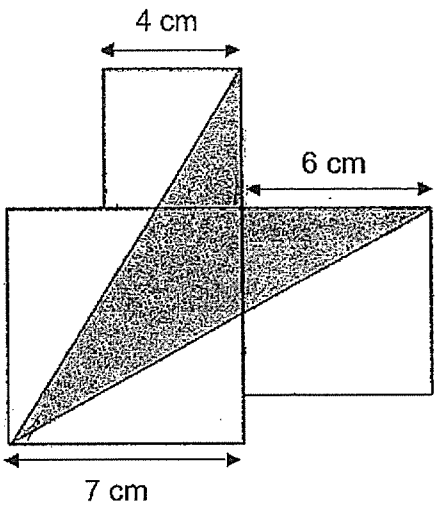


1) 5.190
2) 5.495
3) 5.590
4) 5.725

11. Mr Lee had some magazines. He sold 315 magazines from Monday to Friday. He sold $\frac{2}{5}$ of the remaining magazines on Saturday and Sunday. The number of magazines left was $\frac{1}{4}$ of what he had at first. How many magazines did he have at first?

1) 540
2) 405
3) 90
4) 45

12. The figure below is made up of 3 squares. Find the shaded area.



1) 31 cm^2
2) 35 cm^2
3) 36 cm^2
4) 48 cm^2

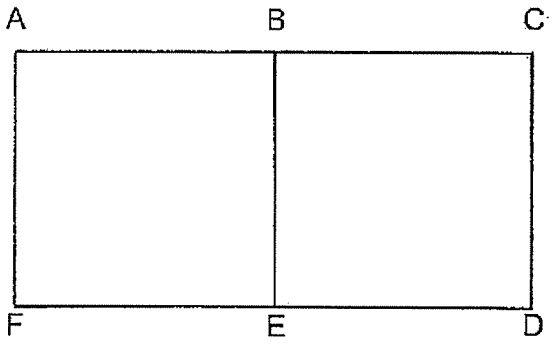
Machine A prints 16 pages more than Machine B in every minute. Machine A and Machine B print a total of 608 pages in 4 minutes. At this rate, how many pages does Machine A print in 1 minute?

1) 68
2) 74
3) 84
4) 90

14. A box of cookies was shared between Jesse and Linn in the ratio of 7 : 4. Linn then decided to share her portion of cookies with her younger brother in the ratio 5 : 3 while Jesse shared her portion of the cookies with her elder sister in the ratio 4 : 3. Among the four of them, the smallest portion of cookies was 12 pieces. How many pieces of cookies were there in the box at first?

1) 33
2) 44
3) 66
4) 88

15. The map below shows the locations of 6 places, A, B, C, D, E and F. ABEF and BCDE are squares. Location C is south of location E. Which of the following location is north-east of B?



1) A
2) C
3) D
4) F

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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)

COMBINED PRELIMINARY EXAMINATION (2020)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet B

Friday **21 August 2020** **1 h**

INSTRUCTIONS TO PUPILS
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of calculators is **NOT** allowed.

Name : _____ **(** **)**

Class : 6.(**)**

This question paper consists of 10 printed pages. (Inclusive of cover page)

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(5 marks)

16. In a sports race, Ethan had to complete swimming, cycling and running. The table below shows the time taken for each sports.

Segments	Time Taken (min)
Swimming	39
Cycling	58
Running	46

What was the total time Ethan took to complete the 3 sports? Give your answer in hours and minutes.

Answer: _____h _____min

17. Arrange the following from the lightest to the heaviest.

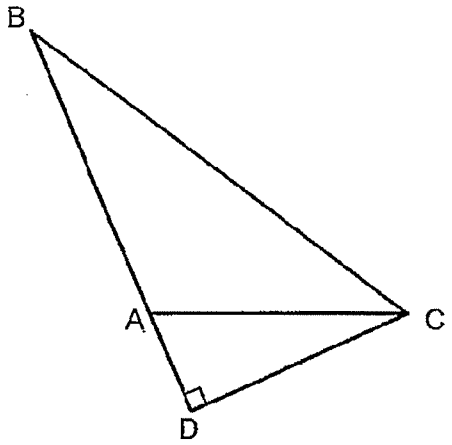
6.35 kg	6 kg 35 g	$6\frac{1}{3}$ kg

Answer: _____, _____, _____

(lightest) (heaviest)

Sub-Total :

18. In the figure below, BD is 20 cm and CD is 8 cm. AD is $\frac{1}{4}$ of BD. Find the area of triangle ABC.



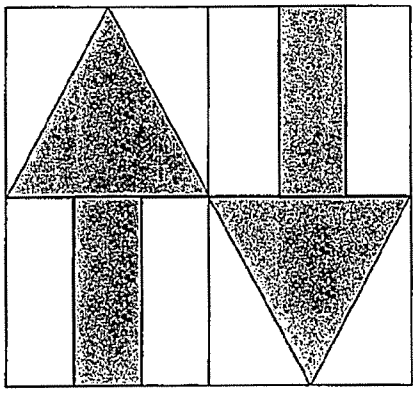
Answer: _____ cm²

19. What is the fraction exactly between $\frac{2}{7}$ and $\frac{2}{5}$?

Answer: _____

Sub-Total : [ ]

20. The figure is made up of 4 squares. Two of the squares are divided equally into 3 rectangles. What fraction of the figure is shaded?



Answer: _____

Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

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21. Find the value of $83 - \frac{74 - 6y}{y} - y$ when $y = 4$.

Answer: _____

22. The table below shows the number of hours that a group of 24 students spent on building a model in a day.

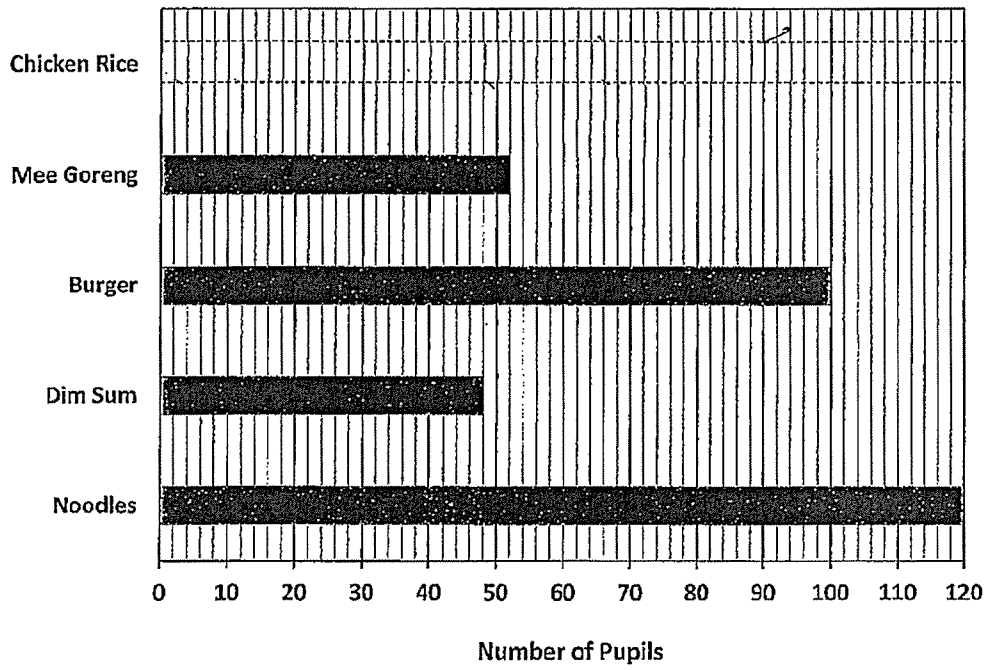
Number of hours spent by each pupil	0	3	4	5
Number of pupils	2	9	8	5

What is the average number of hours each student spent on building the model each day?

Answer: _____h

 Sub-Total : [ ]

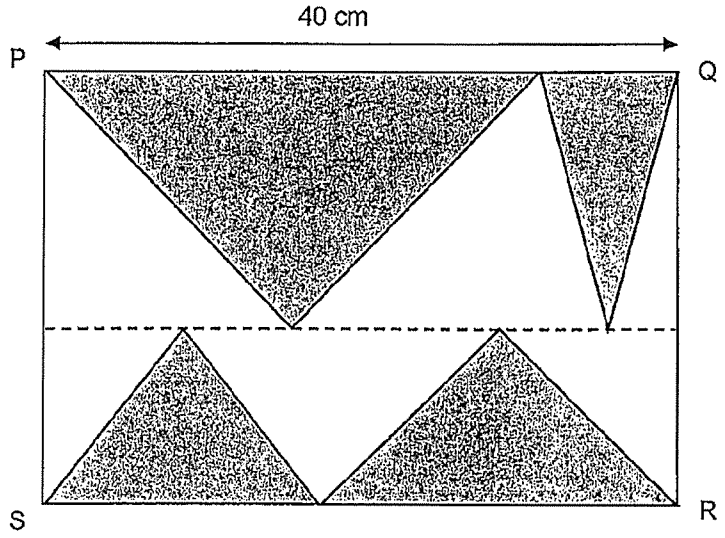
23. The bar graph shows the type of food consumed by a group of pupils in a school canteen. The bar that shows the number of pupils who consumed chicken rice has not been drawn.



20% of the pupils in the canteen consumed chicken rice. Draw the bar that shows the number of pupils who consumed chicken rice in the graph above.

Sub-Total :

24. The figure below shows 4 shaded triangles inside rectangle PQRS. The dotted line is parallel to PQ and SR. The total shaded area is 500 cm^2. Find the length of QR.



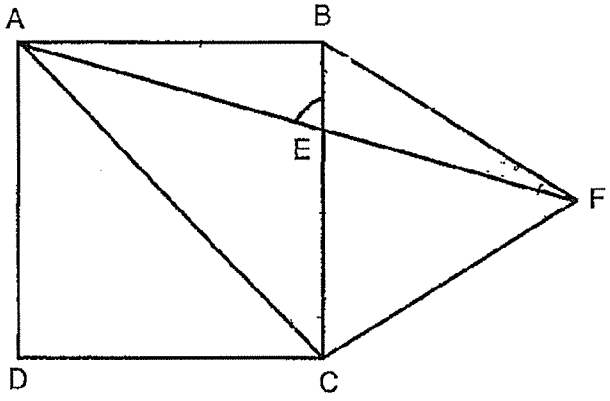
Answer: _____cm

25. Tina packed some gift bags for charity drive. She packed 7 bottles of hand sanitizers, 4 masks and 2 granola bars into every gift bag. She used 117 more hand sanitizers than masks for all her gift bags. How many granola bars did Tina pack altogether?

Answer: _____

Sub-Total : [ ]

26. In the figure below, not drawn to scale, ABCD is a square and BCF is an equilateral triangle. AEF is a straight line. Find $\angle AEB$.



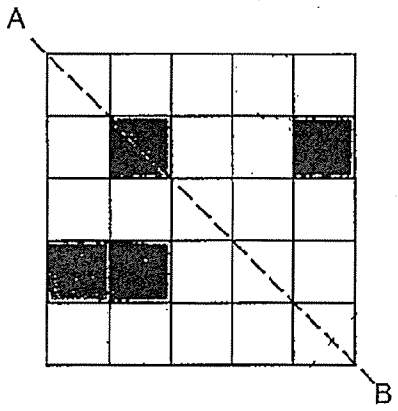
Answer: _____°

27. There were 150 members in a club in March. This was an increase of 20% when compared to February. In April, only 115 members remained in the club. What is the percentage decrease in the number of members in April compared to February?

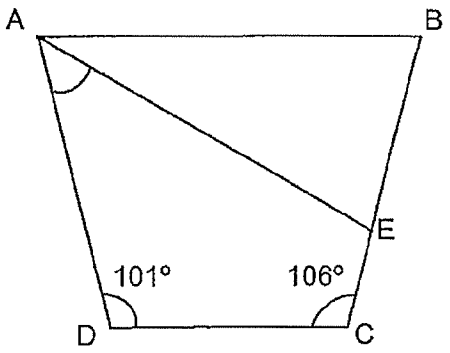
Answer: _____%

Sub-Total : [ ]

28. In the figure below, shade the minimum additional number of squares so that AB is the line of symmetry for the figure.



29. ABCD is a trapezium. $\angle BCD = 106°$ and $\angle ADC = 101°$. AB = AE. Find $\angle DAE$.



Answer: _____ °

Sub-Total : [ ]

30. Kelly has $38. What is the greatest number of muffins she can buy?

First 3 muffins	$3.20 each
Additional muffin	$3 each

Answer: _____

End of Paper 1

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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)

COMBINED PRELIMINARY EXAMINATION (2020)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet B

Friday **21 August 2020** **1 h**

INSTRUCTIONS TO PUPILS
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
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Name : _____ **(** **)**

Class : 6.(**)**

This question paper consists of 10 printed pages. (Inclusive of cover page)

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(5 marks)

16. In a sports race, Ethan had to complete swimming, cycling and running. The table below shows the time taken for each sports.

Segments	Time Taken (min)
Swimming	39
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What was the total time Ethan took to complete the 3 sports? Give your answer in hours and minutes.

Answer: _____h _____min

17. Arrange the following from the lightest to the heaviest.

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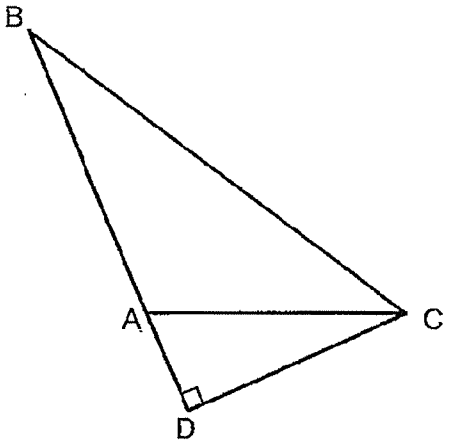
Answer: _____, _____, _____

(lightest) (heaviest)

18. In the figure below, BD is 20 cm and CD is 8 cm. AD is $\frac{1}{4}$ of BD. Find the area of triangle ABC.



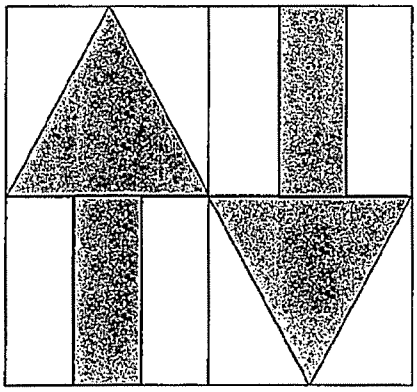
Answer: _____ cm^2

19. What is the fraction exactly between $\frac{2}{7}$ and $\frac{2}{5}$?

Answer: _____

Sub-Total : [ ]

20. The figure is made up of 4 squares. Two of the squares are divided equally into 3 rectangles. What fraction of the figure is shaded?



Answer: _____

Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

---

21. Find the value of $83 - \frac{74 - 6y}{y} - y$ when $y = 4$.

Answer: _____

22. The table below shows the number of hours that a group of 24 students spent on building a model in a day.

Number of hours spent by each pupil	0	3	4	5
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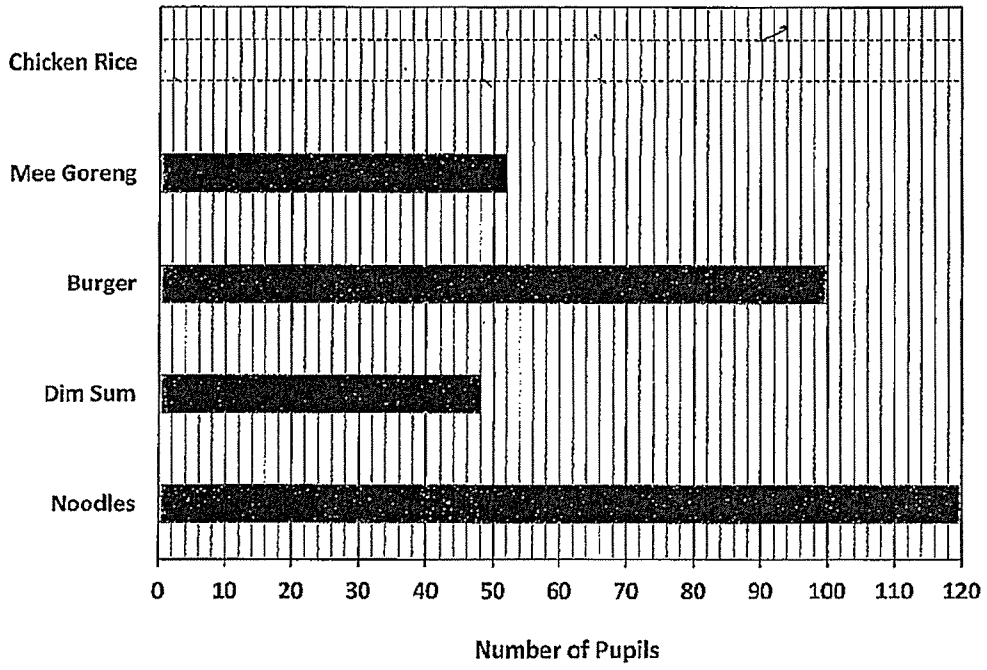
Sub-Total : [ ]

23. The bar graph shows the type of food consumed by a group of pupils in a school canteen. The bar that shows the number of pupils who consumed chicken rice has not been drawn.



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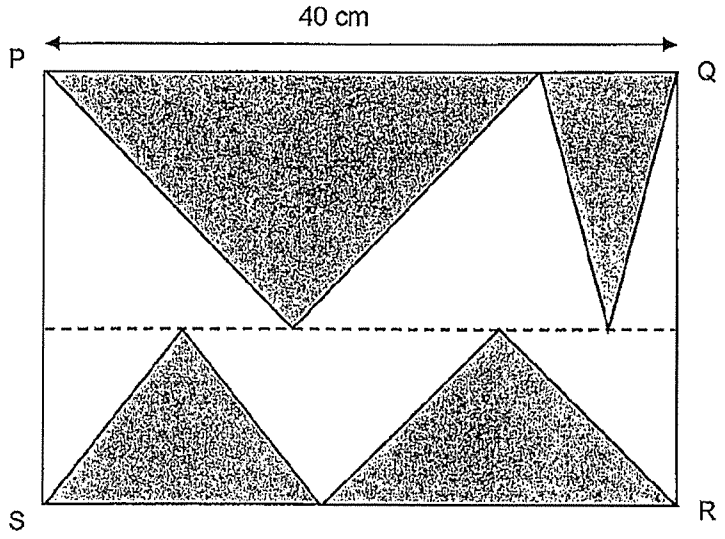


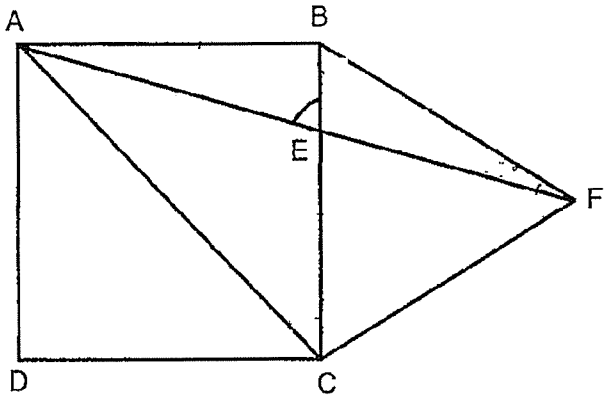
Answer: _____cm

25. Tina packed some gift bags for charity drive. She packed 7 bottles of hand sanitizers, 4 masks and 2 granola bars into every gift bag. She used 117 more hand sanitizers than masks for all her gift bags. How many granola bars did Tina pack altogether?

Answer: _____

Sub-Total : [ ]

26. In the figure below, not drawn to scale, ABCD is a square and BCF is an equilateral triangle. AEF is a straight line. Find $\angle AEB$.



Answer: _____°

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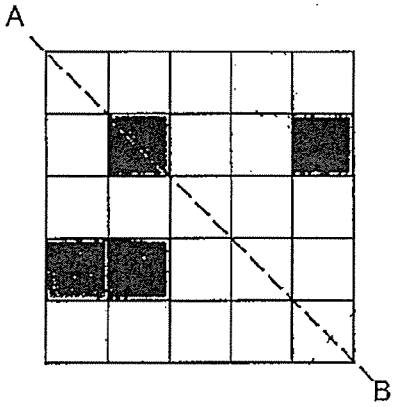
Answer: _____%

Sub-Total : [ ]

28. In the figure below, shade the minimum additional number of squares so that AB is the line of symmetry for the figure.



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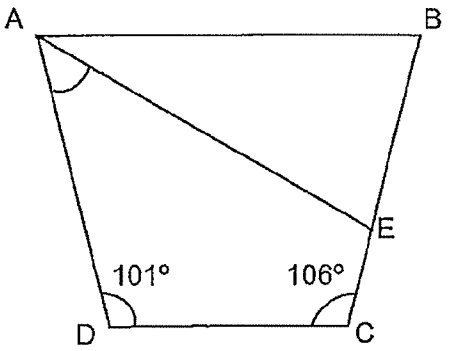

Answer: _____ °

Sub-Total : [ ]

30. Kelly has $38. What is the greatest number of muffins she can buy?

First 3 muffins	$3.20 each
Additional muffin	$3 each

Answer: _____

End of Paper 1

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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)

COMBINED PRELIMINARY EXAMINATION (2020)
PRIMARY 6

MATHEMATICS

PAPER 2

Friday **21 August 2020** **1 h 30 min**

INSTRUCTIONS TO PUPILS
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Show all your workings as marks are awarded for correct working.
5. Write your answers in this booklet.
6. The use of an approved calculator is expected, where appropriate.

Name : _____ ( )

Class : 6.( )

Parent's Signature:_____

Booklet / Paper	Possible Marks	Marks Obtained
Booklet A	20	
Booklet B	25	
Paper 2	55	
Total	100	

This question paper consists of 15 printed pages. (Inclusive of cover page)

Questions **1** to **5** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers to the units stated. (10 marks)

1. For every box of surgical masks he sells, Mr Lee earns \$12. An additional \$8 is given to him for every 10 boxes of surgical masks he sells. How many boxes of surgical masks must Mr Lee sell to make \$3200?

Answer: _____

2. A rectangular swimming pool 20 m wide, 60 m long and 4 m deep, contains 800 m^3 of water. How much more water has to be added so that the water level is 30 cm from the top? Give your answer in cubic metres.

Answer: _____ m^3

Sub-Total :

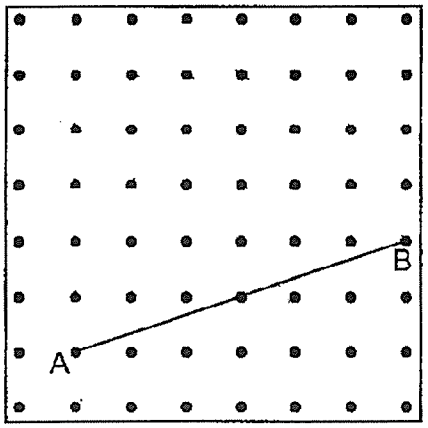
3. During a sale, a departmental store gave a storewide discount of 25%. Mr Tan who is a member of the departmental store was entitled to an additional 8% discount on the discounted price. What was the total discount he enjoyed?

Answer: _____%

4. The average mass of a group of children was 66.8 kg. When Mrs Pang measured and recorded the mass of these children, she wrongly recorded one child's mass as 59 kg when it should have been 95 kg. As a result, Mrs Pang calculated the average mass as 64.8 kg.
How many children were there in the group?

Answer: _____

5. In the grid below, by joining dots, draw 4 more straight lines to create two isosceles triangle ABC and ABD. Label all points.



 Sub-Total :

For questions **6** to **17**, show your working clearly and write your answers in the in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

---

6. April went to the supermarket to buy some toilet rolls for the family. Toilet rolls were sold at the prices shown below.

Big Pack	Small Pack
$ (3n - 2)	$ (n + 3)

She bought 1 big pack and 2 small packs. She paid the cashier $50 and received $21 change. What is the value of n?

Answer: _____ [3]

7. John wanted to save some money. He saved $8 each day from Monday to Friday and $16 each day on Saturday and Sunday. Starting on Thursday, how many days did John take to save $480?

Answer: _____ [3]

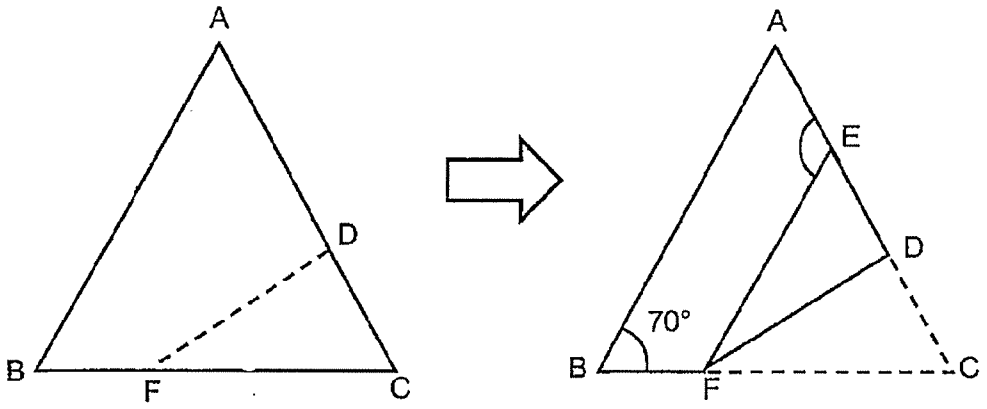
8. The table below shows the time Wilson took for 4 x 10m shuttle run during his training sessions.

Attempt	1st	2nd	3rd	4th	5th	6th	7th	8th
Time taken (in seconds)	13.1	12.5	11	11.8	12.2	12	11.4	?

If he wants to improve his average time taken by 0.3 seconds, what timing should he attain for his 8th attempt?

Answer: _____ [3]

9. The figure on the left, not drawn to scale, is a triangular piece of paper ABC. It is folded along the dotted line FD to obtain the figure on the right such that AB is parallel to EF. AEDC is a straight line. $\angle ABF = 70°$. Find $\angle AEF$.



Answer : _____ [3]

Sub-Total :

10. The table below shows the charges for water usage.

Volume of water	Charges
First 40 m^3	\$1.21 per m^3
Every additional cubic metre	\$1.52 per m^3

a) The Lee family used 32 m^3 of water in June. How much did the Lee family pay for the water used?

b) The Ali family used 58 m^3 of water in June. How much more did the Ali family pay than the Lee family for the water used in June?

Answer: (a) _____ [1]

(b) _____ [2]

Sub-Total :

11. Admission tickets for a school musical performance were sold to adults and children at different prices as shown in the table below.

	Price per ticket
Adult	$30
Child	$12

(a) Mrs Goh spent an equal amount of money on the adult and child tickets. What fraction of the tickets she bought were adult tickets?

(b) The school collected a total of $11760 from selling tickets for the musical performance. The number of adult tickets sold was $\frac{3}{10}$ the number of child tickets sold. How many child tickets were sold?

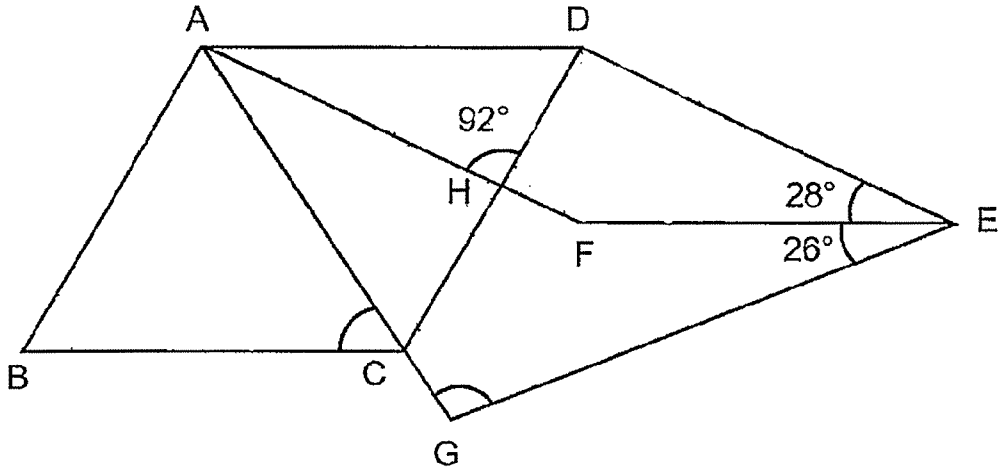
Answer: (a) _____ [2]

(b) _____ [2]

Sub-Total :

12. In the figure below, not drawn to scale, ABCD and ADEF are rhombuses. ACG is a straight line. $\angle AHD = 92°$. $\angle DEF = 28°$. $\angle FEG = 26°$.

(a) Find $\angle ACB$.
(b) Find $\angle AGE$.

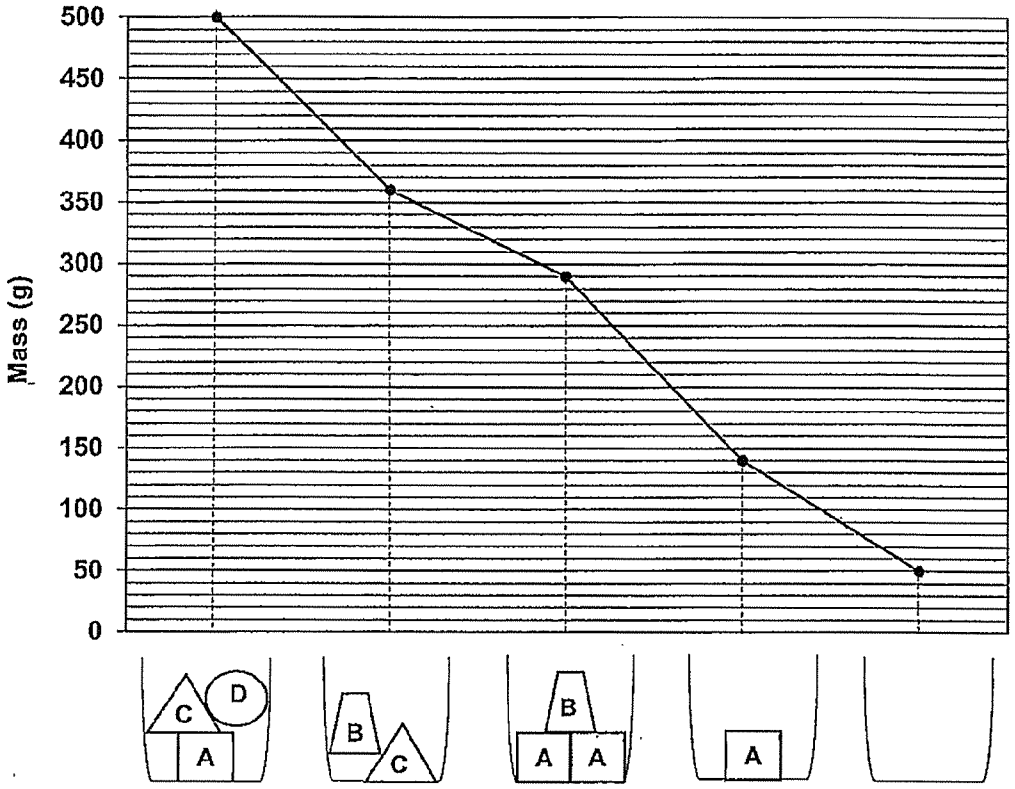


Answer: (a)_____ [2]

(b)_____ [3]

Sub-Total :

13. The line graph below shows the mass of a container when empty and when different combinations of objects, A, B, C and D are placed in the container.



a) What is the mass of Object B?

b) What is the total mass of Objects A, B and D?

Answer: (a)_____ [2]

(b)_____ [2]

Sub-Total :

14. Sofie had some cupcakes. She had 72 more chocolate cupcakes than red velvet cupcakes. She had 36 fewer blueberry cupcakes than red velvet cupcakes. After selling $\frac{1}{6}$ of the chocolate cupcakes, $\frac{2}{3}$ of the red velvet cupcakes and $\frac{7}{9}$ of the blueberry cupcakes, Sofie had 427 cupcakes left altogether. How many chocolate cupcakes did Sofie sell?

Answer: _____ [4]

15. Mrs Tan bought some forks and spoons in the ratio of 4 : 3. Each spoon cost 50 cents more than each fork. She spent a total of $156 on the forks and spoons. The amount she spent on the forks was $12 more than the amount she spent on the spoons.

a) How much did she spend on the spoons?

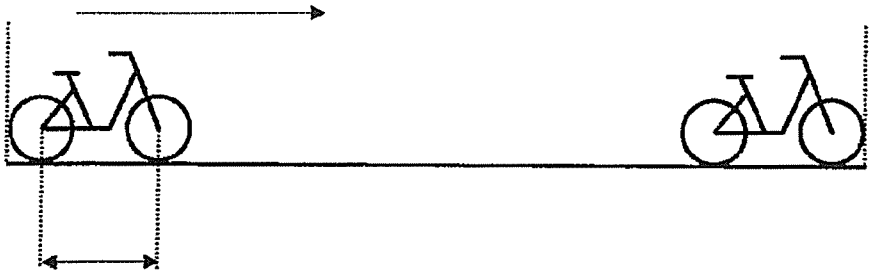
b) How many forks and spoons did she buy altogether?

Answer: (a)_____ [1]

(b)_____ [3]

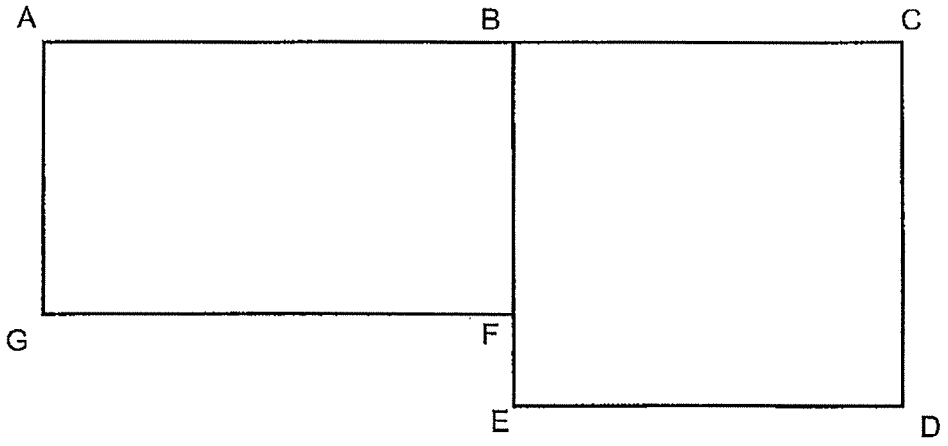
Sub-Total :

16. Jeff had a toy bicycle fixed on a straight track. He pushed the bicycle from one end of the track to the other end of the track where it stopped. The radius of the wheels is 3.5 cm and the distance between the 2 centers of the wheels is 10 cm. The length of the track is 259 cm. How many revolutions did each wheel make? (Take $\pi = \frac{22}{7}$)



Answer: _____ [4]

17. The figure below is made up of rectangle ABFG and square BCDE. AC = 52 cm and EF = 8 cm. The perimeters of rectangle ABFG and square BCDE are the same. Find the area of the figure.



Answer: _____ [5]

End of Paper 2

Sub-Total :

SCHOOL : ACS PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

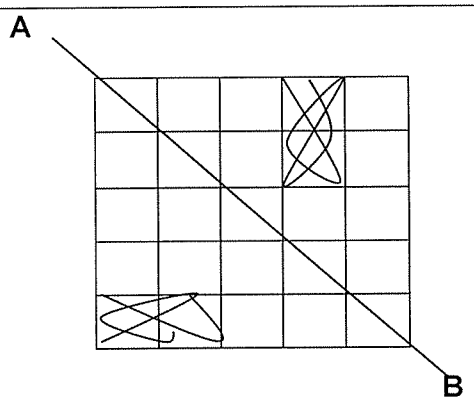
PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	4	2	2	4	1	4	4	3

Q 11	Q12	Q13	Q14	Q15
1	2	3	4	1

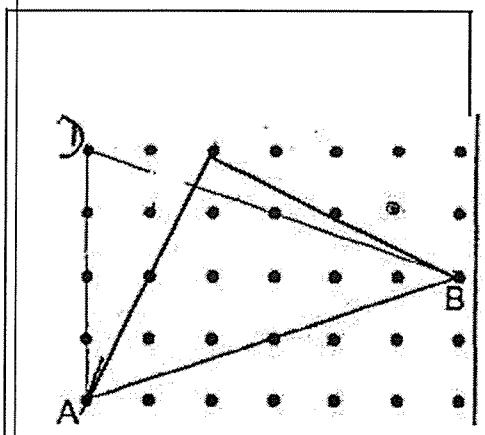
PAPER 1 BOOKLET B

Q16)	2h 23 min
Q17)	6kg 35g , $6\frac{3}{5}$, 6.35kg
Q18)	20 x 8 = 160 160 x ½ = 80 5 x 8 = 40 40 x ½ = 20 80 – 20 = 60
Q19)	$\frac{12}{35}$
Q20)	$\frac{5}{12}$
Q21)	66.5
Q22)	3.5h
Q23)	200 + 120 = 320 320 ÷ 60 = 4 4 + 20 = 80
Q24)	500 x 2 = 1000 1000 ÷ 40 = 25

Q25)	117 ÷3 = 39 39 x 2 = 78
Q26)	90 + 60 = 150 180 – 150 = 30 180 – 75 = 105 180 – 105 = 75°
Q27)	8%
Q28)	
Q29)	47°
Q30)	3.20 x 3 = 9.60 38 – 9.60 = 28.40 28 ÷3 = 9 9 + 3 = 12

PAPER 2

Q1)	12 x 10 = 120 120 + 8 = 128 3200 ÷ 128 = 25 25 x 10 = 250
Q2)	364m
Q3)	75 ÷100 = 0.75 0.75 x 8 = 6 25 + 6 = 31%
Q4)	95 – 59 =36 66.8 – 64.8 = 2 36 ÷2 = 18

Q5)	
Q6)	50 – 21 = 29 29 – 4 = 25 25 ÷5 = 5
Q7)	8 + 8 + 16 + 16 = 48 480 – 48 = 432 432÷72 = 6 7 x 6 = 42 42 + 4 = 46
Q8)	13.1 + 12.5 + 11 + 11.8 + 12.2 + 12 + 11.4 = 84 84 ÷7 = 12 12 – 0.3 = 11.7 11.7 x 8 = 93.6 93.6 – 84 = 9.6
Q9)	∠BFE = 180 – 70 = 110 ∠CFE = 180 – 110 = 70 ∠CFD = 70 ÷2 = 35 $\angle FCD = \frac{180 - 70}{2} = 550$ ∠ AEF = 180 – 55 = 125°

Q10)	a)32 x 1.21 = $38.72 b)1.21 x 40 = 48.4 58 – 40 = 18 18 x 1.52 = 27.36 48.4 + 27.3675.76 75.76 – 38-72 = $37.04
Q11)	a)1A = 30 x 2 1C = 12 x 5 2A = 60 5C = 60 2 + 5 = 7 $=\frac{2}{7}$ b)3 x 30 = 90 10 x 12 = 120 120 + 90 = 210 11760 ÷210 = 56 56 x 10 = 560
Q12)	a)60° b)94°
Q13)	a)60g b)260g
Q14)	57
Q15)	a)$72 b)42
Q16)	11
Q17)	904cm2

CATHOLIC HIGH SCHOOL

PRELIMINARY EXAMINATION (2020)

PRIMARY SIX

MATHEMATICS

PAPER 1

(BOOKLET A)

Name : _____( )

Class : Primary 6_____

Date : 25 August 2020

Total time for Booklet A and B : 1 hour

15 questions

20 marks

Parent's signature : _____

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

The use of calculators is **NOT** allowed.

This booklet consists of 14 printed pages excluding the cover page.

Questions **1** to **10** carry 1 mark each. Questions **11** to **15** carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. All diagrams are not drawn to scale. (20 marks)

---

1. In 54.32, what does the digit 3 stand for?

(1) 3 ones

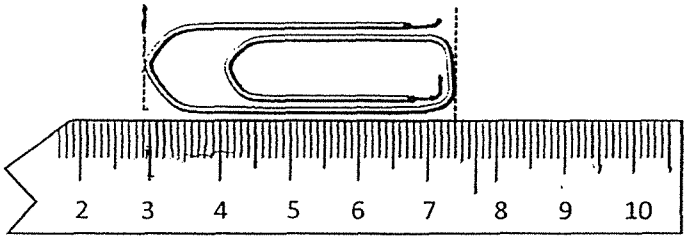
(2) 3 tens

(3) 3 tenths

(4) 3 hundredths

---

2. What is the length of the paper clip?



(1) 4.4 cm

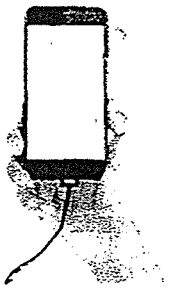
(2) 4.5 cm

(3) 5.5 cm

(4) 7.4 cm

---

3. Which of the following is the likely mass of a handheld mobile phone?



(1) 20 g

(2) 2 g

(3) 200 g

(4) 2000 g

---

4. Suresh paid $15 for 30 cookies. How much did each cookie cost?

(1) 5 ¢

(2) 2 ¢

(3) 20 ¢

(4) 50 ¢

---

5. Mr Ong arranges 18 blue chairs and 24 green chairs in rows. Each row has an equal number of chairs of the same colour. What is the greatest number of chairs that Mr Ong can arrange in each row?

(1) 6

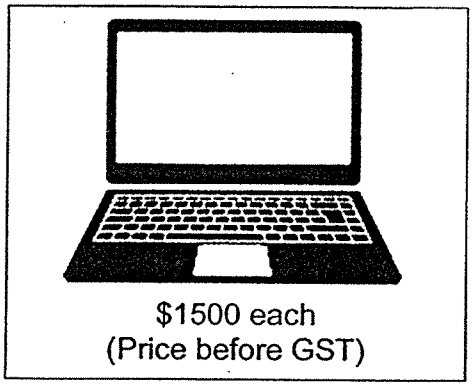
(2) 7

(3) 3

(4) 14

---

6. What is the price of a laptop after adding 7% GST?



(1) $1395

(2) $1493

(3) $1507

(4) $1605

---

7. A group of pupils ran in a race. The table shows the number of pupils with the following times clocked in the race.

Time clocked (s)	150	151	153	155	157	158	160
Number of pupils	2	3	2	7	3	2	2

Prizes were given to the top 7 pupils. Bryan won a prize. What was the slowest time he could have clocked?

(1) 150 s

(2) 153 s

(3) 155 s

(4) 157 s

---

8. $\frac{3}{10}$ of the seats in an aeroplane are business class seats while the rest are economy class seats. $\frac{3}{5}$ of the economy class seats are occupied.
What fraction of all the seats in the aeroplane are unoccupied economy class seats?

(1) $\frac{2}{5} \times \frac{7}{10}$

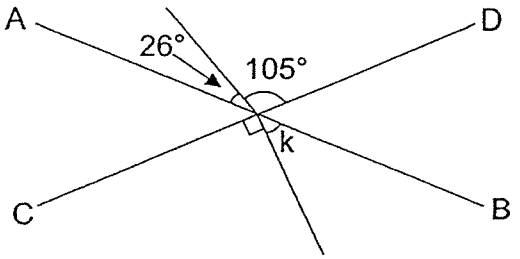
(2) $\frac{2}{5} \times \frac{3}{10}$

(3) $\frac{3}{5} \times \frac{3}{10}$

(4) $\frac{3}{5} \times \frac{7}{10}$

---

9. In the figure, AB and CD are straight lines. Find $\angle k$.



(1) 15°

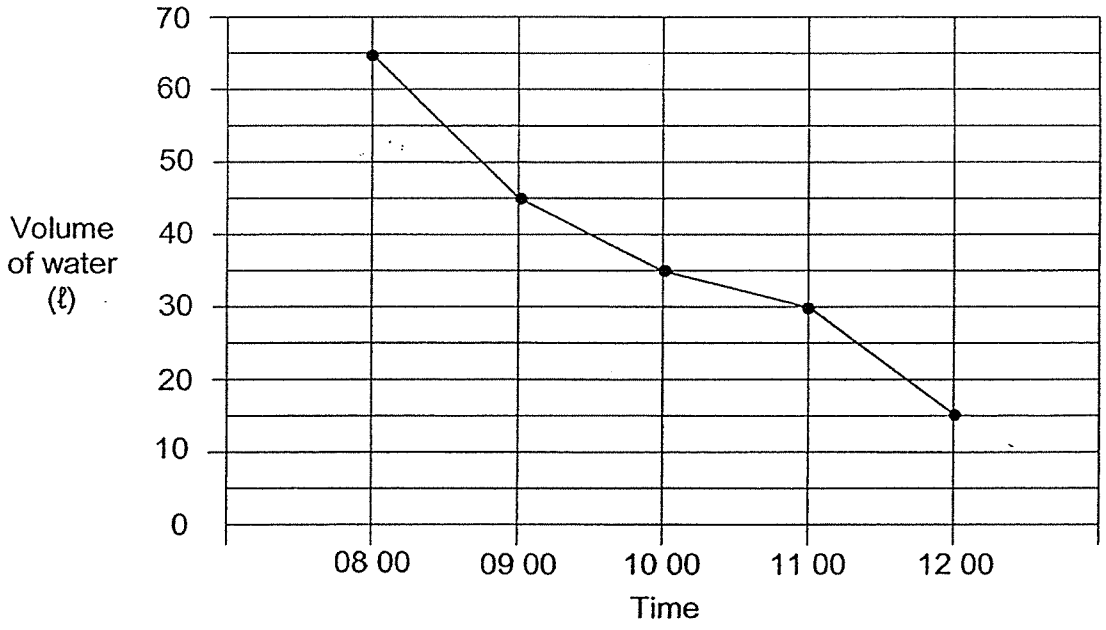
(2) 26°

(3) 41°

(4) 49°

---

10. A tank was filled with 65 ℓ of water at 08 00. Water flowed out of the tank from 08 00 to 12 00. The line graph shows the volume of water in the tank from 08 00 to 12 00.



During which one-hour period was the decrease in volume of water the greatest?

(1) Between 08 00 and 09 00

(2) Between 09 00 and 10 00

(3) Between 10 00 and 11 00

(4) Between 11 00 and 12 00

---

11. Arrange these distances from the shortest to the longest.

4.23 km	$4\frac{1}{5}$ km	4 km 25 m

	Shortest				Longest
(1)	4.23 km	,	$4\frac{1}{5}$ km	,	4 km 25 m
(2)	4 km 25 m	,	$4\frac{1}{5}$ km	,	4.23 km
(3)	$4\frac{1}{5}$ km	,	4 km 25 m	,	4.23 km
(4)	$4\frac{1}{5}$ km	,	4.23 km	,	4 km 25 m

---

12. Lin, Mat and Ned went for a run of different distances L, M and N respectively. During the run, they covered an equal distance before they stopped for a water break. At that time, Lin had completed $\frac{1}{2}$ of distance L, Mat had completed $\frac{2}{3}$ of distance M and Ned had completed $\frac{3}{5}$ of distance N.
What is the ratio of the distance L to distance M to distance N?

(1) 1 : 2 : 3

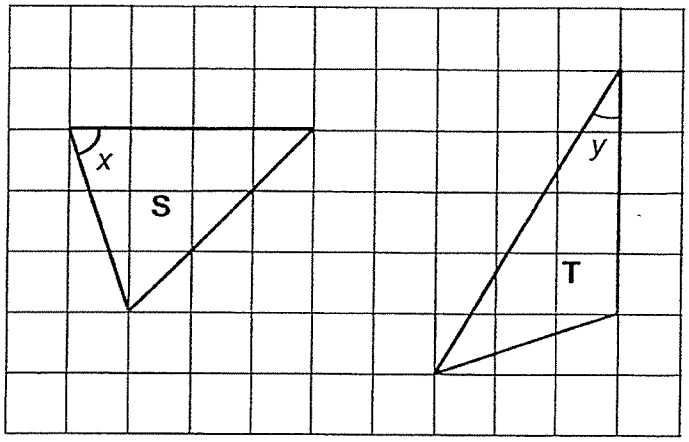
(2) 2 : 3 : 5

(3) 12 : 9 : 10

(4) 15 : 20 : 18

(Go on to the next page)

13. Two figures S and T are shown in the square grid below.



Which of the following statement(s) is/are **true**?

A. $\angle x + \angle y = 90°$

B. Figure S has the same area as Figure T.

C. Figure S has the same perimeter as Figure T.

(1) B only

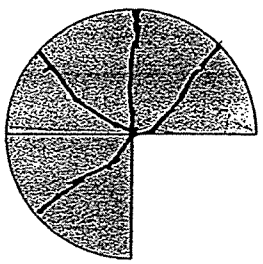
(2) C only

(3) A and B only

(4) A and C only

---

14. The figure is made up of a semicircle and a quarter circle of the same radius 4 cm. What is the perimeter of the shaded figure?
Give your answer in terms of π.



(1) 6π cm

(2) 12π cm

(3) $(6\pi + 8)$ cm

(4) $(6\pi + 12)$ cm

---

15. Mdm Loke made $\frac{5}{6}$ ℓ of drink. She poured the drink into as many cups of $\frac{1}{3}$ ℓ as possible and had some drink left. What was the volume of the drink left?

(1) $\frac{5}{12}$ ℓ

(2) $\frac{1}{2}$ ℓ

(3) $\frac{1}{3}$ ℓ

(4) $\frac{1}{6}$ ℓ

END OF BOOKLET A

CATHOLIC HIGH SCHOOL

PRELIMINARY EXAMINATION (2020)

PRIMARY SIX

MATHEMATICS

PAPER 1

(BOOKLET B)

Name : _____( )

Class : Primary 6_____

Date : 25 August 2020

Total time for Booklet A and B : 1 hour

15 questions

25 marks

Parent's signature : _____

BOOKLET A	20
BOOKLET B	25
Total Marks	45

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

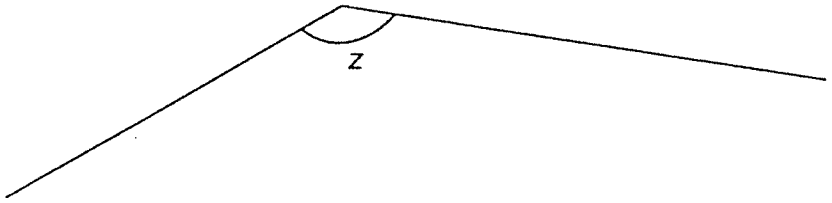
The use of calculators is **NOT** allowed.

This booklet consists of 14 printed pages excluding the cover page.

Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (5 marks)

Do not write in this space

16. Measure and write down the size of $\angle z$ in the figure.



Ans: _____ °

17. Express 0.7% as a fraction.

Ans: _____

18. Find the value of $\frac{10k}{4} - 2k + 3$ when $k = 10$.

Ans: _____

(Go on to the next page)

Refer to the figure below to answer questions 19 and 20.

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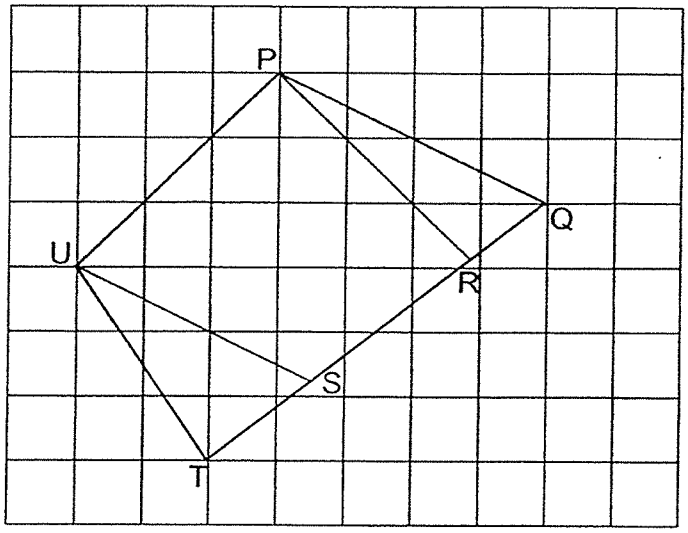


19. Name the two lines that are parallel to each other.

Ans: _____ and _____

20. Name the two lines that are perpendicular to each other.

Ans: _____ and _____

Total marks for questions 16 to 20

5

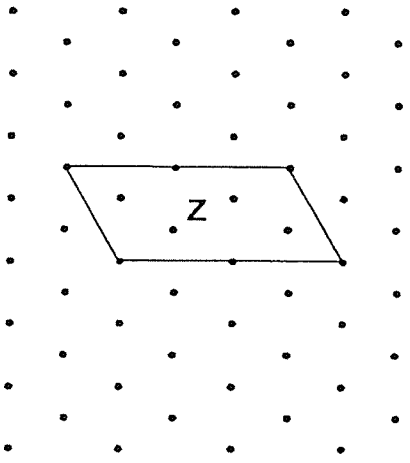
(Go on to the next page)

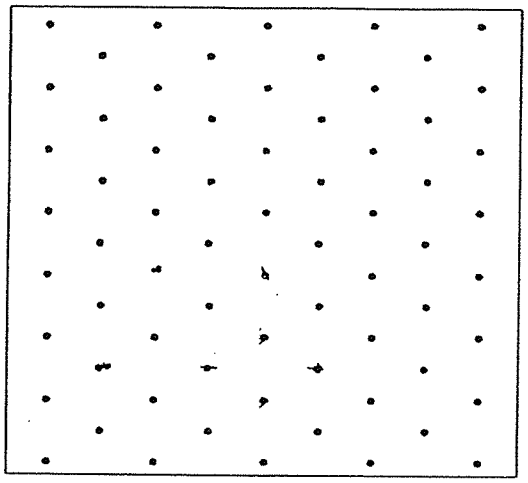
Questions **21** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale.

(20 marks)

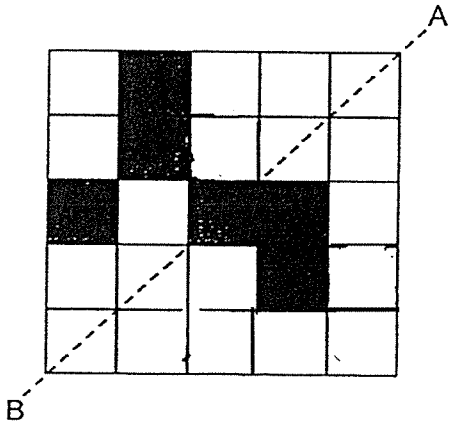
Do not write in this space

21. Draw an equilateral triangle with the same area and perimeter as Figure Z in the box provided.





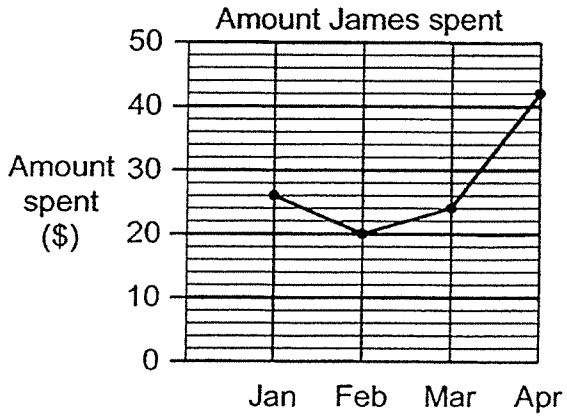
22. There are 6 shaded squares in the figure. Shade 3 more squares to form a symmetric figure with AB as the line of symmetry.



(Go on to the next page)

23. James received a fixed amount of allowance from his parents each month. Every month, James spent some of his allowance and saved the rest of the allowance in his savings box.
The graph shows the amount of money he spent each month.

Do not write in this space



a) In which month did he save the most of his allowance in his savings box?

b) In April, $\frac{3}{4}$ of the amount James spent was on food. How much did he spend on food?

Ans: a) _____

b) $_____

24. In 1 minute, Machine A can pack 3 boxes of biscuits while Machine B can pack 4 boxes of biscuits. Both machines started packing at 12.50 p.m. At what time will both machines pack 105 boxes of biscuits in total? Leave your answer in 24-hour clock.

Ans: _____

(Go on to the next page)

25. Samantha wanted to fill 24 similar bottles completely with the drink she made but found that she needed an additional 3.1 ℓ of the drink. Instead, she filled 18 similar bottles and had 5.3 ℓ of the drink left. What was the capacity of one such bottle?

Do not write in this space

Ans: _____ ℓ

26. The table shows the charges for fishing rod rental at a fishing pond.

FISHING ROD RENTAL	
For the first hour	$8
For every additional $\frac{1}{2}$ hour	$3

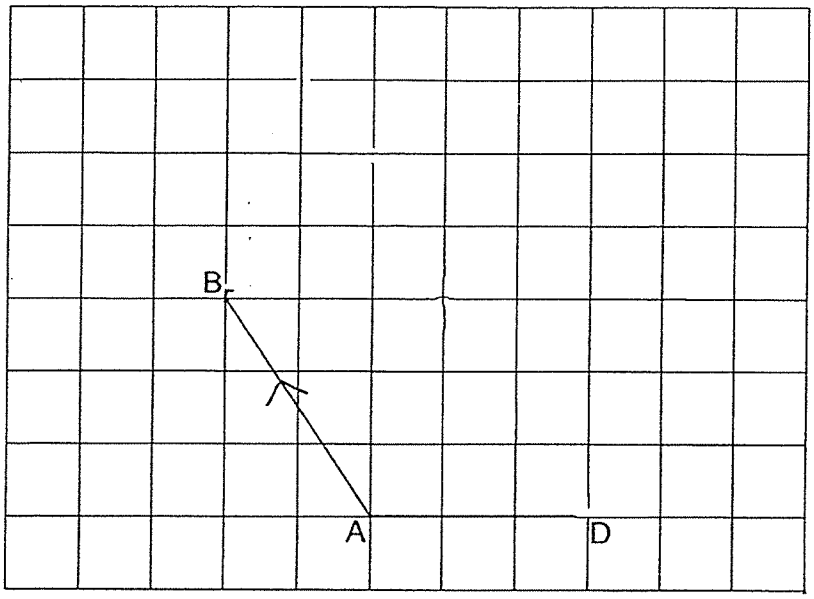
Tim has $32 and wants to rent a fishing rod. What is the greatest number of hours Tim can rent the fishing rod for?

Ans: _____ h

(Go on to the next page)

27. In the square grid below, AB and AD are two sides of a trapezium ABCD. AB is parallel to CD and the length of CD is twice the length of AB. Complete the trapezium by drawing the other two sides.

Do not write in this space



28. Luke needed some pieces of tape, each of length 8 cm, to seal some boxes. He bought 3 rolls of tape measuring 100 cm each. What was the greatest number of 8-cm tapes that Luke could cut from the 3 rolls of tape?

Ans: _____

(Go on to the next page)

29. John had $60 more than Kurt at first. Kurt gave $12 to John. John then had 3 times as much money as Kurt. How much money did Kurt have in the end?

Do not write in this space

Ans: $_____

30. Kevin cuts a square paper along the dotted lines as shown in Figure 1 to get 3 identical rectangular pieces of paper. Rectangle ABCD in Figure 2 is one such rectangular paper with a perimeter of 56 cm.
What is the length of one side of the square paper in Figure 1?

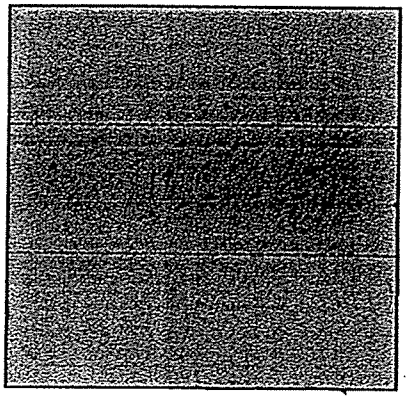


Figure 1

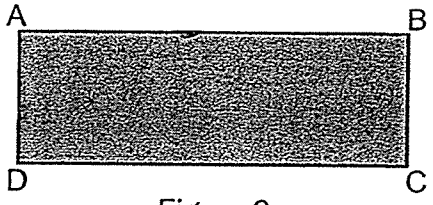


Figure 2

Ans: _____ cm

Total marks for questions 21 to 30

END OF BOOKLET B
END OF PAPER 1

20

CATHOLIC HIGH SCHOOL

PRELIMINARY EXAMINATION (2020)

PRIMARY SIX

MATHEMATICS

PAPER 2

Name : _____( )

Class : Primary 6_____

Date : 25 August 2020

Total time : 1 h 30 min

17 questions

55 marks

Parent's signature : _____

PAPER 1 BOOKLET A	20
PAPER 1 BOOKLET B	25
PAPER 2	55
Total Marks	100

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

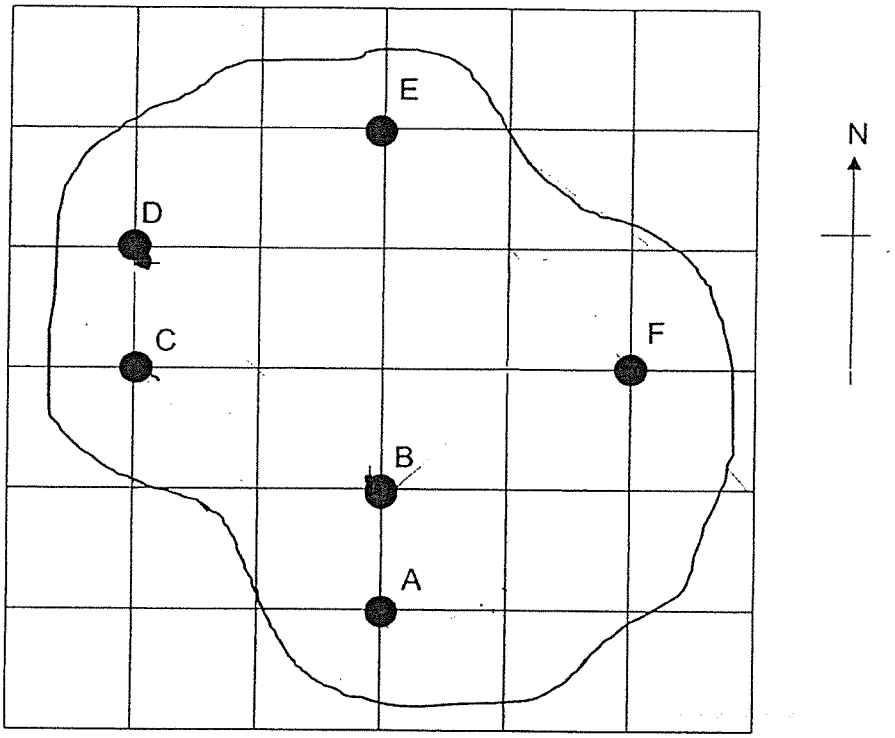
The use of an approved calculator is expected, where appropriate.

This booklet consists of 15 printed pages excluding the cover page.

Questions **1** to **5** carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (10 marks)

Do not write in this space

1. The square grid shows the position of points A, B, C, D, E and F.



a) In which direction is point A from point C?

b) Jamie stood at one of the points facing point B. After she turned 45° anti-clockwise, she faced point F. Which point was Jamie at before she turned?

Ans: a) _____

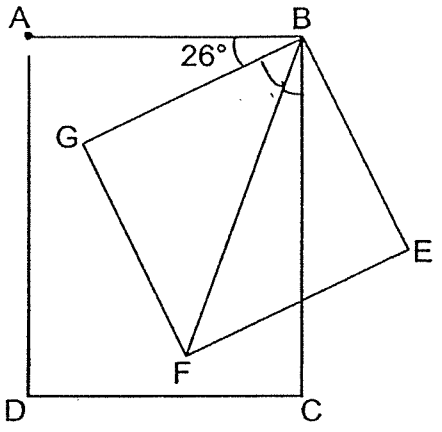
b) Point _____

2. Penny had 16 twenty-cent coins and 20 fifty-cent coins. Richard had as many coins as Penny but had $2.10 less. How many twenty-cent coins did Richard have?

Do not write in this space

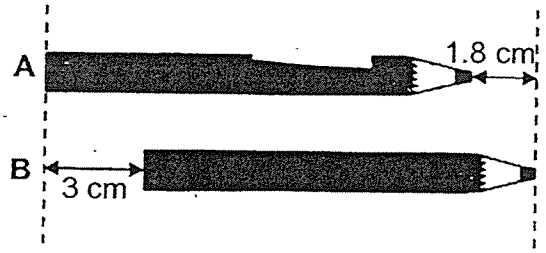
Ans: _____

3. In the figure, ABCD is a rectangle. BEFG is a square and $\angle ABG = 26°$. Find $\angle FBC$.



Ans: _____ °

4. The length of pencil B is $\frac{9}{10}$ the length of pencil A.
Find the length of pencil A.



Do not write in this space

Ans: _____ cm

5. For a recycling project, Edmund collected 20 bottles and Fred collected $7k + 8$ bottles. They collected 154 bottles altogether.
What is the value of k?

Ans: _____

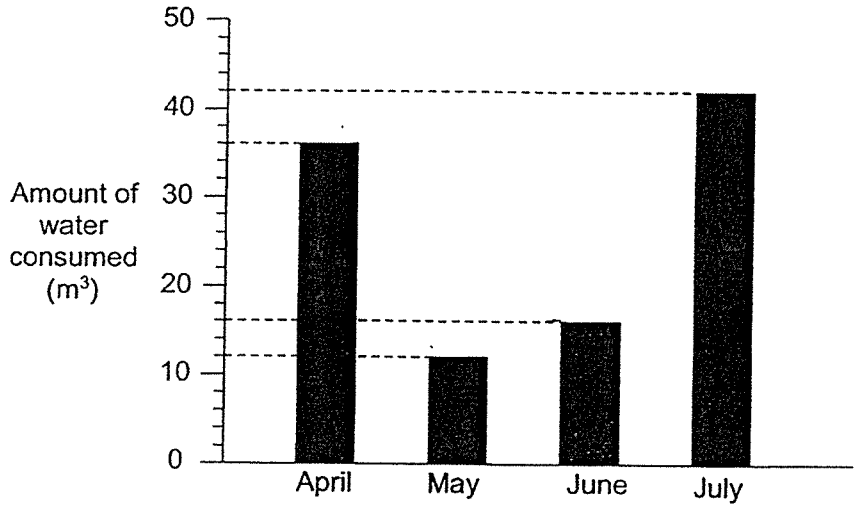
(Go on to the next page)

For questions **6** to **17**, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

(45 marks)

Do not write in this space

6. The bar graph shows the amount of water consumed by a family from April to July.



a) How many times was the amount of water consumed in April as compared to May?

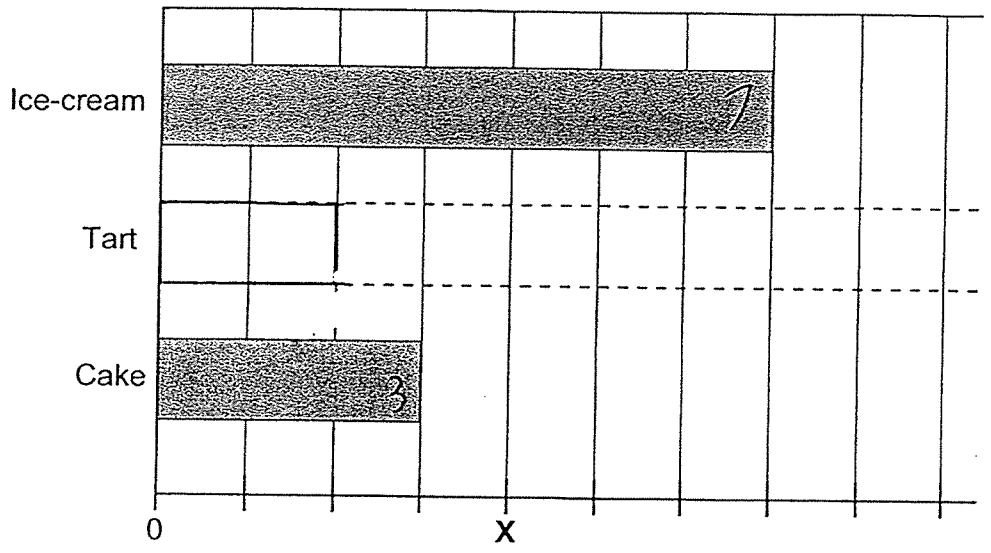
b) What was the percentage increase in the amount of water consumed by the family in July compared to June?

Ans: a) _____ [1]

b) _____ [2]

7. Ice-cream, tart and cake were available as dessert at a dinner. Each diner was asked to choose one dessert. The bar graph represents the diners' choices. The number of diners is not shown on the scale and the bar that shows the number of diners who chose tart has not been drawn.

Do not write in this space



[2]

a) What was the ratio of the number of diners who chose cake to the number of diners who chose ice-cream?

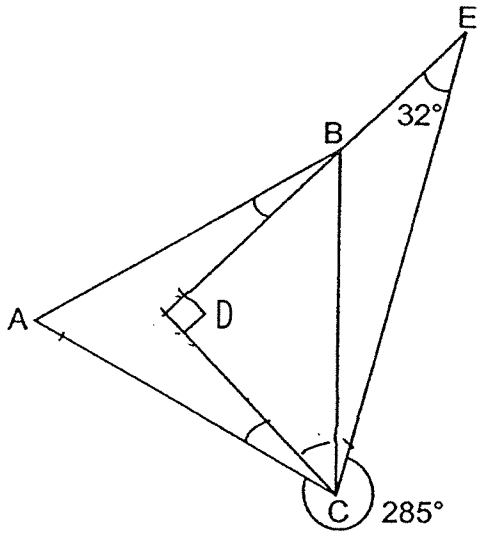
b) '**X**' was the average number of diners who chose a dessert at the dinner. Draw the bar to represent the number of diners who chose tart in the graph.

Ans: a) _____ [1]

8. In the figure below, ABC is an equilateral triangle and CDE is a right-angled triangle. Point B of the equilateral triangle lies on the side DE of the right-angled triangle. $\angle DEC = 32°$ and $\angle ECA = 285°$.

Do not write in this space

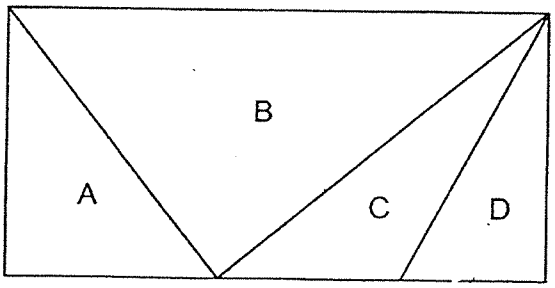
Find $\angle ABD$.



Ans: _____ [3]

9. A rectangle is made up of four triangles A, B, C and D. The area of A to the area of the rectangle is 1 : 5 while the area of D to the area of the rectangle is 1 : 7.

Do not write in this space



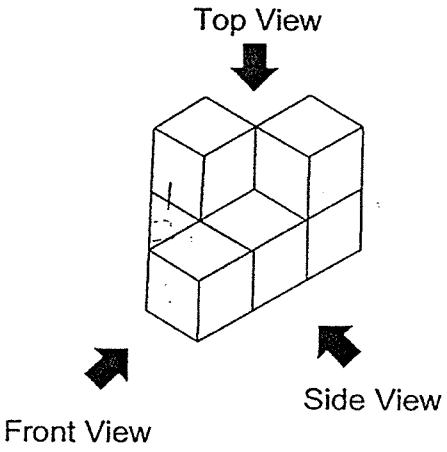
The area of B is 140 cm^2. What is the area of C?

Ans: _____ [3]

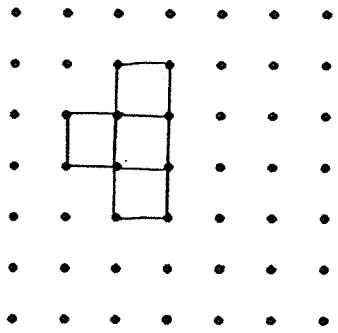
10. The solid below is made up of 6 identical cubes.

Do not write in this space

a) Draw the top view of the solid on the grid below.



Top View



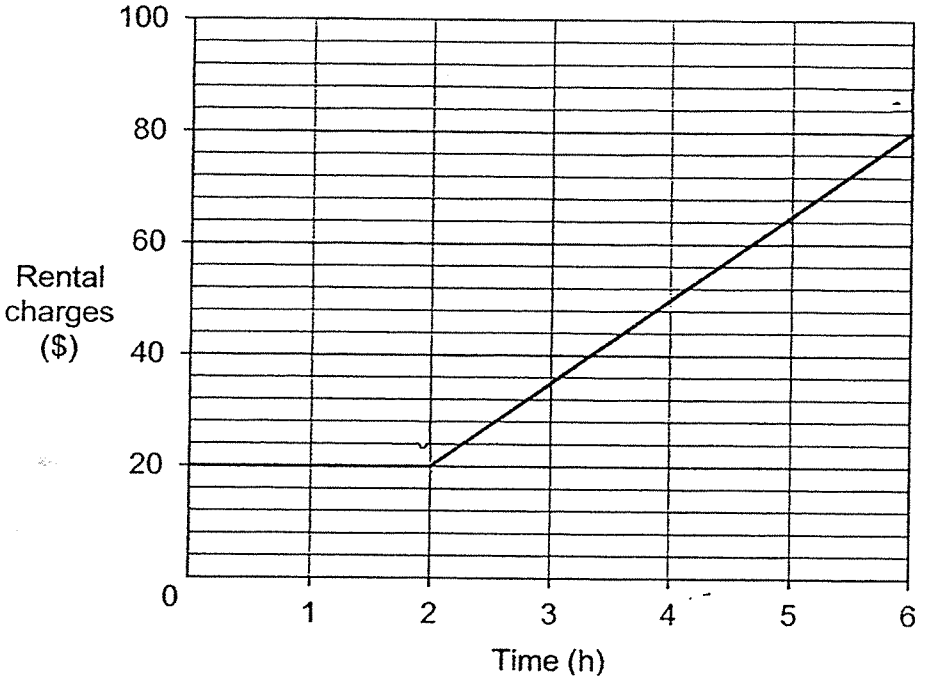
[1]

b) Linus painted the whole solid including the base. The total area painted is 416 cm^2. What is the length of one edge of each cube?

Ans: b) _____ [2]

11. The graph shows the rental charges for a recreation room for the first 6 hours.

Do not write in this space



a) How much is the rental charge for the recreation room for the first hour?

b) How much is the rental charge for every hour after the first 2 hours of use?

c) The rate for rental charge remains the same after the 6th hour. How much is the rental charge for 7 hours?

Ans: a) _____ [1]

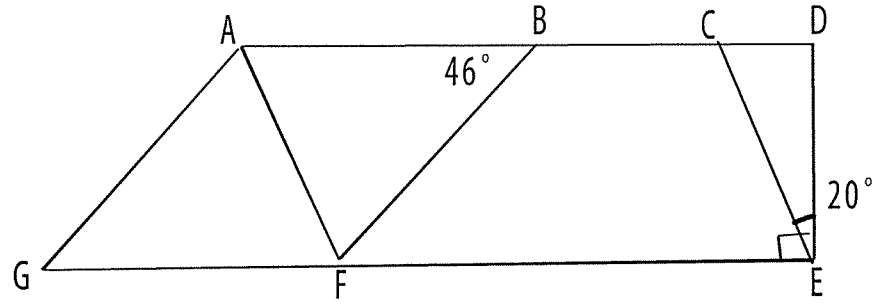
b) _____ [2]

c) _____ [1]

(Go on to the next page)

12. In the figure below, ABF and AFG are isosceles triangles with BA = BF and GA = GF respectively. AF is parallel to CE. ∠DEF is a right angle. ABC is a straight line.

Do not write in this space



a) Find ∠BCE.

Ans: a) _____ [2]

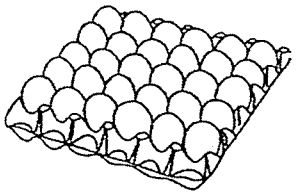
b) The figure above is not drawn to scale. Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
ABFG is a rhombus			
ACEF is a parallelogram			

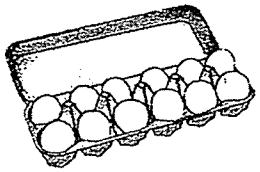
[2]

13. Eggs were only sold in trays of 30 eggs at a shop.

Do not write in this space



Mr Lee bought some such trays of eggs and re-packed them into carton boxes of 12 eggs as shown below. He needed 6 more eggs to have exact carton boxes of 12 eggs and 26 more carton boxes than trays.



How many eggs did Mr Lee buy from the shop?

Ans: _____ [4]

14. Mr Ang paid $315 for 21 chairs. Mr Bay paid the same amount but got 4 more chairs than Mr Ang because he used a membership coupon that gave him a discount for every 4 chairs purchased.

Do not write in this space

a) How much would Mr Bay had paid for the chairs without the use of the membership coupon?

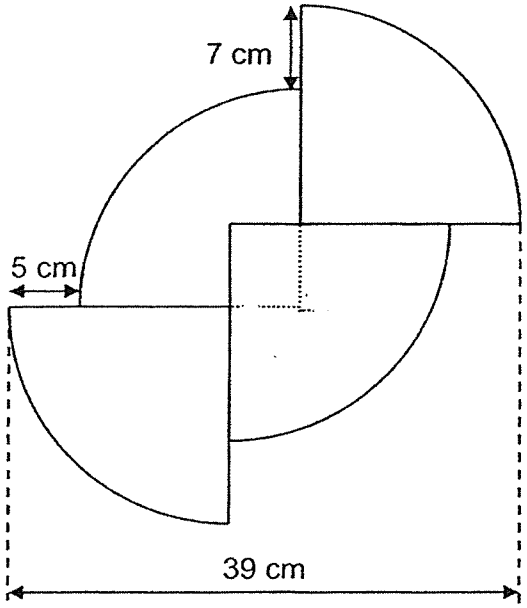
b) With the use of the membership coupon, how much was the discount for every 4 chairs purchased?

Ans: a) _____ [2]

b) _____ [2]

15. The figure is made of 4 identical quarter circles with 2 quarter circles overlapping to form a rectangle.

Do not write in this space



a) What is the radius of each quarter circle?

b) Find the area of the figure.
Take $\pi = 3.14$

Ans: a) _____ [1]

b) _____ [3]

16. Mabel used white dots, grey dots and sticks to form figures that follow a pattern. The first four figures of the pattern are shown below.

Do not write in this space

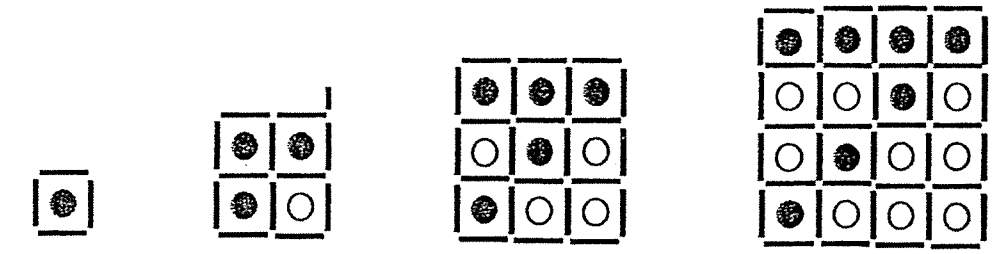


Figure 1 Figure 2 Figure 3 Figure 4

The table below shows the number of white dots, black dots and sticks used for each figure.

Figure Number	1	2	3	4	5
Number of white dots	0	1	4	9	
Number of grey dots	1	3	5	7	
Number of sticks	4	12	24	40	60

[1]

a) Fill in the table for Figure 5.

b) How many white dots are there in Figure 50?

c) What is the total number of sticks in Figure 50?

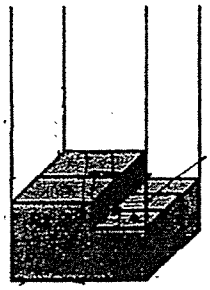
b) _____ [2]

c) _____ [2]

17. Axel and Brady had some identical large cubes and some identical small cubes. Each of them had a rectangular box of the same base but different height. They packed their cubes into their own box with cubes of the same size stacked on top of each other.

Do not write in this space

The figure below shows the first layer of cubes packed in each box.



a) Axel's box was packed tightly to the brim without any gaps. There were 50 more small cubes than large cubes. How many cubes were packed into the box altogether?

b) In Brady's box, the space occupied by all the large cubes and that of the small cubes was the same. What fraction of the cubes was the small cubes?

Ans: a) _____ [3]

b) _____ [2]

END OF PAPER 2

SCHOOL : CATHOLIC HIGH PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	2	3	4	1	4	2	1	3	1

Q 11	Q12	Q13	Q14	Q15
2	3	1	3	4

PAPER 1 BOOKLET B

Q16) 141°

Q17) $\frac{7}{1000}$

Q18) $\frac{10k}{4} - 2k + 3 = \frac{100}{4} - 20 + 3$

= 25-20+3

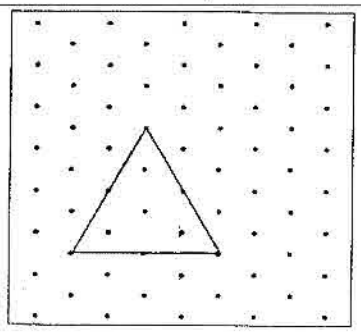
= 5+3

=8

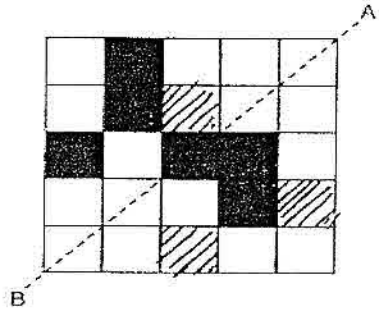
Q19) PQ and US

Q20) UP AND PR

Q21)



Q22)



Q23) a) February

b) $\frac{3}{2} x \frac{21}{1} = \frac{63}{2}$

=31.5

Q24) 3+4=7

105/7=15

1305

Q25) 5.3+3.1=8.4

24-16=6

8.4/6=1.4

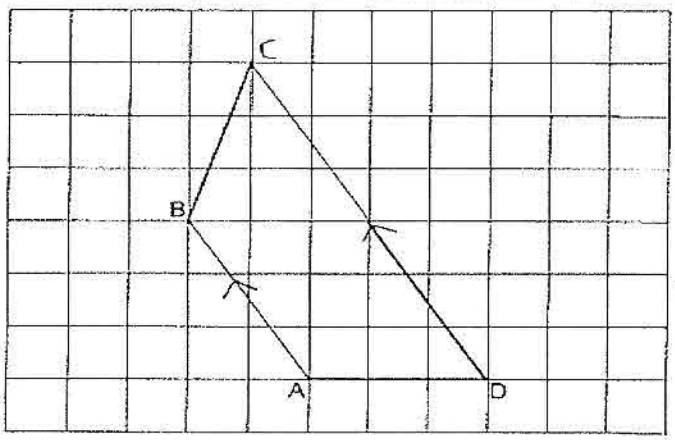
Q26) 32-8=24

24/3=8

8x0.5=4

4+1=5

Q27)



Q28) 100/8=12R4

12 x 3=36

Q29) **2u=12+60+12=84**

1u=42

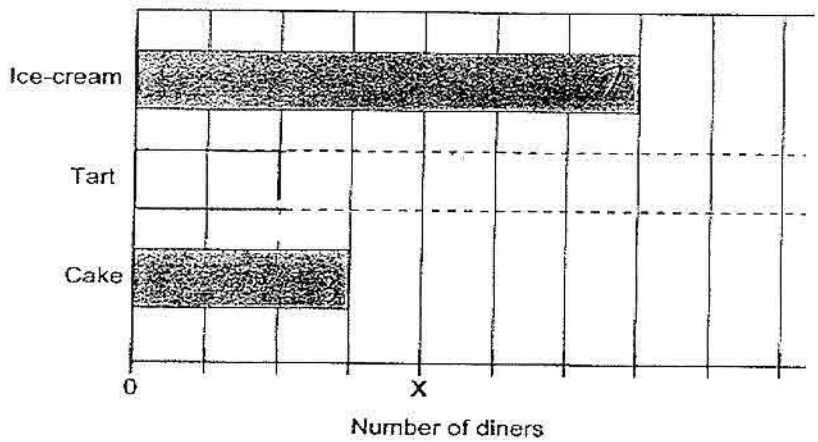
Q30) 3u+1u+3u+1u=8u

8u=56

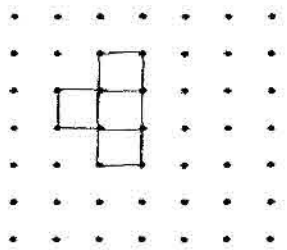
1u=7

3u=21

PAPER 2

Q1)	a) Southeast b) E
Q2)	50-20=30 210/30=7 16+7=23
Q3)	90-26-45=19
Q4)	9u+3=10u+1.8 1u=1.2 10u=12
Q5)	20+7k+8=7k+28 7k+28=154 7k=126 K18
Q6)	a)36/12=3 b)42-16=26 $\frac{26}{16}\ x\ 100\% = 162.5\%$
Q7)	 a) b) 4 x 3 =12 12-7-3=2 3:7
Q8)	180-32-90=58 360-90=270 360-58-285=17 360-60-270-17=13
Q9)	140 x 2 =280 5u-2.5u-1u-5/7u=11/14u 5u=280 1u=56 11/14u= 44

Q10)



a)

b)6x6=36

36-10=26

416/26=16

4x4=16

Q11) a)$20

b)$15

c)$95

Q12) a) 180-67=113

b) ABFG is a rhombus:not possible to tell

ACEF is a parallelogram: false

Q13) 30 x 5 =150

150+6=156

26 x 12=312

312-6=306

306/18=17

17 x 30=510

Q14) a) 21+4=25

315/12=15

15x25=375

b) 315-15=300

300/6=50

60-50=10

Q15) a) 39-5=34

34/2=17

b) 17x17x3.14=907.46

7x5=35

907.46-35=872.46

Q16) a) Number of white dots : 0 1 3 9 (16)

Number of grey dots : 1 3 5 7 (9)

b) 50-1=49

49x49=2401

c) 50+1=51

51x2=102

50x102=5100

Q17) a) 2 large = 3 small

1 set-> 4large +9 small cubes

50/5=10

4+9=13

10x13=130

b) Common height->6cm

6/3=2

6/2=3

3x3x3=27

Small=2x2x2=8

216/27=8

216/8=27

8+27=35

Ans: 27/35

HENRY PARK PRIMARY SCHOOL
2020 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 1
(BOOKLET A)

Name: _____ ( ) Parent's Signature

Class: Primary 6F _____ _____

Marks:

Paper 1	Booklet A	20
	Booklet B	25
Paper 2		55
Total		100

Total Time for Booklets A and B: 1 hour

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.
You are **not** allowed to use a calculator.

Questions **1** to **10** carry 1 mark each. Questions **11** to **15** carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4) and shade your answer in the Optical Answer Sheet.

(20 marks)

---

1 In 31.42, which digit is in the tenths place?

(1) 1

(2) 2

(3) 3

(4) 4

2 Express $1\frac{3}{50}$ as a decimal.

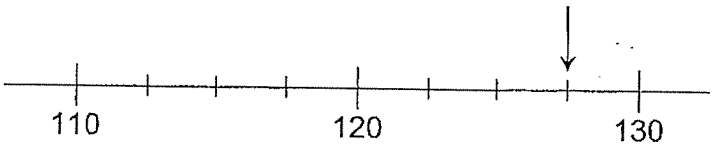
(1) 1.06

(2) 1.3

(3) 1.35

(4) 1.6

3 Which of the following is closest to the number indicated by the arrow in the number line below?



(1) 123

(2) 126

(3) 127

(4) 129

(Go on to the next page)

4 Andre had a number of red apples, green apples and oranges in the ratio 8 : 3 : 2. What is the ratio of the number of oranges to the total number of apples that Andre had?

(1) 2 : 11

(2) 2 : 13

(3) 11 : 2

(4) 13 : 2

5 On a bus, 9 of the passengers were men, 15 of the passengers were women and the rest were children. Given that 20% of the passengers were children, how many passengers were there in total on the bus?

(1) 24

(2) 30

(3) 96

(4) 120

6 A train left Town X for Town Y. The journey took 3 h 50 min. The train arrived at Town Y at 11 05. What time did the train leave Town X?

(1) 07 15

(2) 08 40

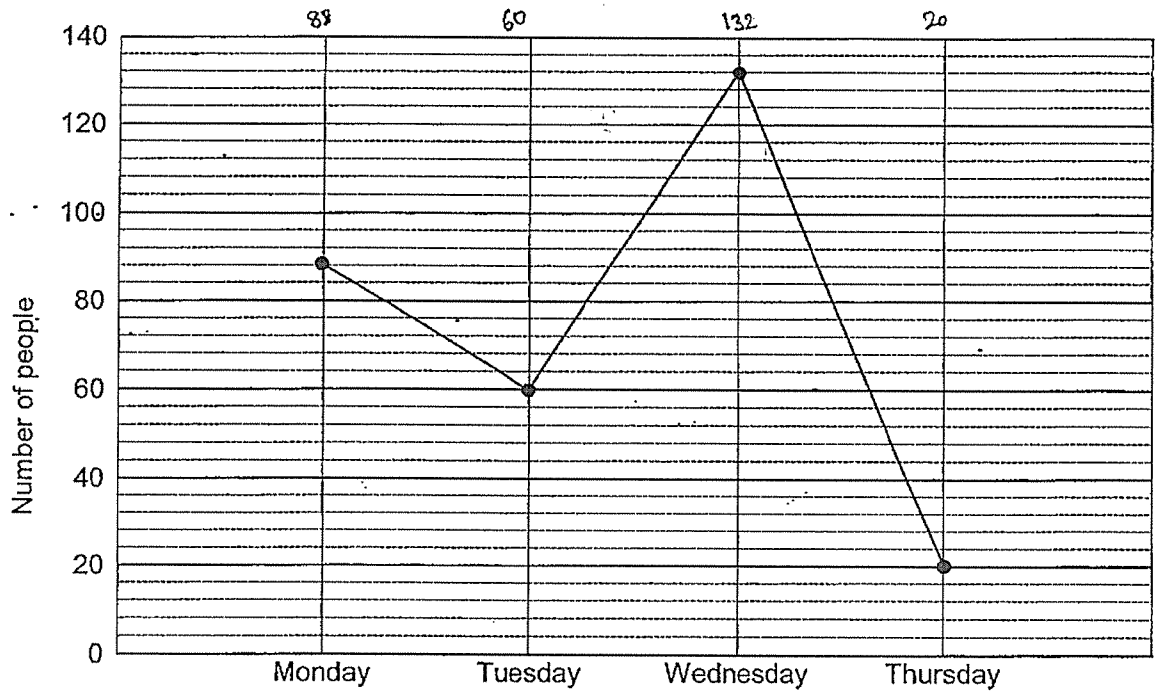
(3) 08 45

(4) 08 55

(Go on to the next page)

Use the information below to answer Questions **7** *and* **8.**

The graph shows the number of people who visited a shop from Monday to Thursday.



7 How many people visited the shop on Monday and Tuesday?

(1) 142

(2) 144

(3) 148

(4) 154

8 Given that a total of 104 adults visited the shop on Wednesday and Thursday, find the ratio of the number of children to the number of adults who visited the shop on these two days.

(1) 6 : 13

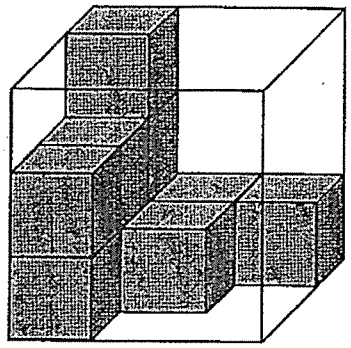
(2) 6 : 19

(3) 13 : 6

(4) 13 : 19

(Go on to the next page)

9 The figure below shows a plastic cubical container partly filled with unit cubes. How many more unit cubes are needed to fill the container completely?



(1) 8

(2) 10

(3) 17

(4) 19

10 Which one the following fractions is larger than $\frac{1}{4}$?

(1) $\frac{6}{24}$

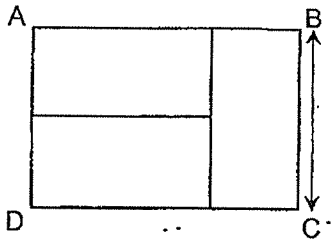
(2) $\frac{5}{21}$

(3) $\frac{4}{15}$

(4) $\frac{3}{13}$

(Go on to the next page)

11 In the figure below, ABCD is made up of 3 identical rectangles. The perimeter of ABCD is 60 cm. Find the length of BC.



(1) 6 cm

(2) 12 cm

(3) 18 cm

(4) 20 cm

12 The lengths of two ribbons are in the ratio 5 : 3. The length of one ribbon is 30 cm longer than the other. Find the length of the shorter ribbon.

(1) 18 cm

(2) 45 cm

(3) 50 cm

(4) 75 cm

13 At first, Walter and Ming Ming were facing the same direction. Then, Walter turned 225° anti-clockwise to face South-West and Ming Ming turned 45° clockwise to face South-East. Which direction were Walter and Ming Ming facing at first?

(1) East

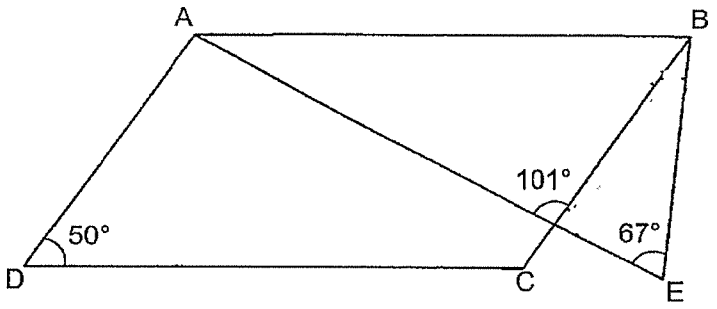
(2) North

(3) South

(4) West

(Go on to the next page)

14 In the figure below, ABCD is a parallelogram and ABE is a triangle. Find ∠ABE.



(1) 50°

(2) 84°

(3) 90°

(4) 94°

15 The chairs in a hall were arranged in rows. Each row had the same number of chairs. William sat on one of the chairs. There were 5 chairs to his right and 5 chairs to his left. There were 4 rows of chairs in front of him and 8 rows of chairs behind him. How many chairs were there altogether in the hall? [3]

(1) 120

(2) 130

(3) 132

(4) 143

HENRY PARK PRIMARY SCHOOL
2020 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 1
(BOOKLET B)

Name: _____ ( )

Class: Primary 6 F_____

/ 25

Total Time for Booklets A and B: 1 hour

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

You are **not** allowed to use a calculator.

Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

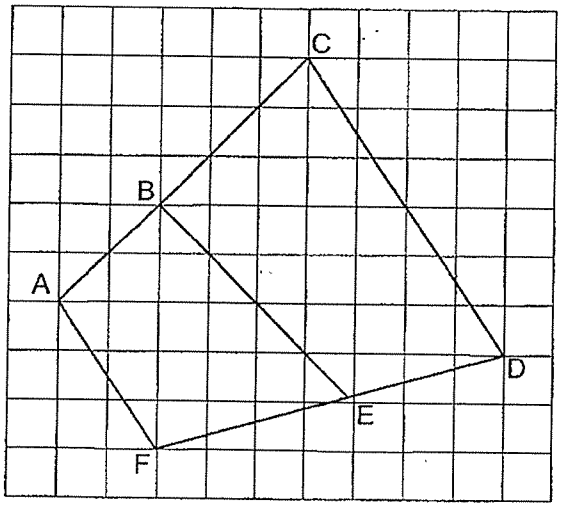
(5 marks)

Do not write in this space

16 Find the value of $\frac{1}{2} \div \frac{1}{10}$

Ans: _____

17 In the figure below, name two lines that are parallel to each other.



Ans: _____ and _____

18 A rectangular tank measures 12 cm by 10 cm by 9 cm. What is the capacity of the tank?

Ans: _____ cm^3

(Go on to the next page)

19 Express 9 minutes as a percentage of 1 hour.

Do not write in this space

Ans: _____ %

20 Find the missing number in the box.

$8 + \boxed{?} \div 2 = 12$

Ans: _____

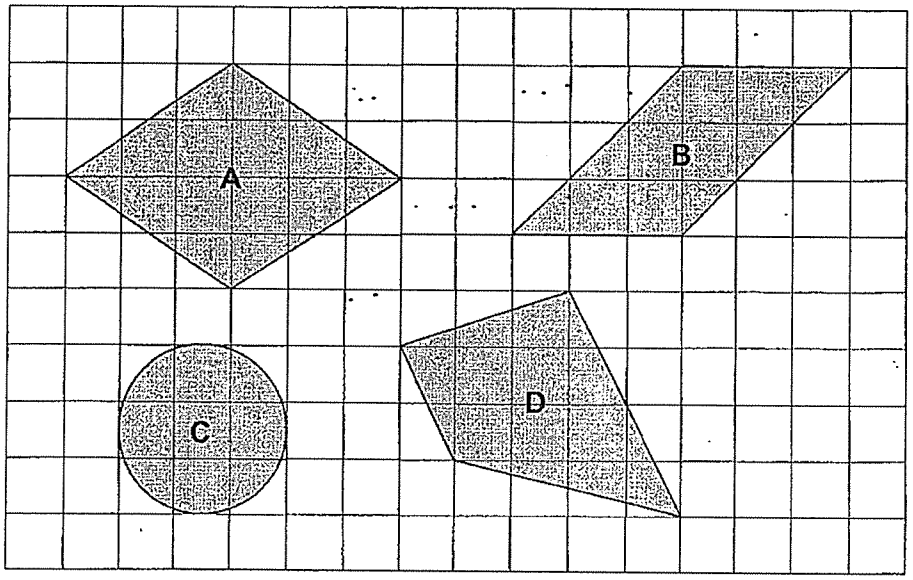
(Go on to the next page)

Questions **21** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(20 marks)

Do not write in this space

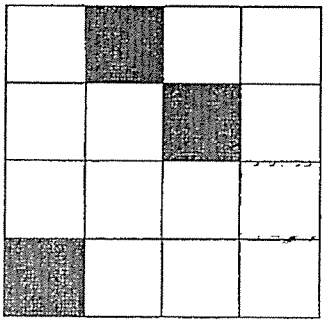
21 **(a)** Four figures, A, B, C and D are drawn on a square grid.



Name all the figures with at least one line of symmetry.

Ans: (a) _____

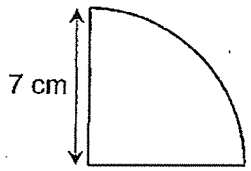
(b) Shade one more square in the figure below to make it symmetrical.



(Go on to the next page)

22 The figure below shows a quarter circle of radius 7 cm. Find the perimeter of the figure. (Take $\pi = \frac{22}{7}$)

Do not write in this space



Ans: _____ cm

23 Mrs Tan deposits $4000 in XYZ Bank for one year at the interest rate of 1.4% per year. How much interest will she get at the end of one year?

Ans: $_____

(Go on to the next page)

24 Ellie had $\$(y + 7)$. Flora had \$4 less than Ellie.
Gloria had $\$2y$ more than Flora.

Do not write in this space

(a) Find the total amount of money the three girls had in terms of y. Express your answer in the simplest form.

(b) Given that the three girls had a total of \$33, find the value of y.

Ans: (a) _____

(b) _____

25 Ace, Ben and Charlie have some marbles. The number of marbles that Ace and Ben have is in the ratio 4 : 5. The total number of marbles Ace and Ben have is three times the number of marbles Charlie has. Given that Ace and Charlie have 350 marbles, how many more marbles does Ben have than Ace?

Ans: _____

(Go on to the next page)

Do not write in this space

26 There are 40 pupils in class 6J. The table below shows the number of points each pupil in the class scored in the first round of a game.

Points scored	0	1	2	3	4	5
Number of pupils	3	6	7	8	10	6

(a) How many pupils in class 6J scored at least 3 points?

(b) Pupils who did not score enough points in the first round could not take part in the second round. 16 pupils could not take part in the second round. What was the least number of points a pupil must have scored in order to take part in the second round?

Ans: (a) _____

(b) _____

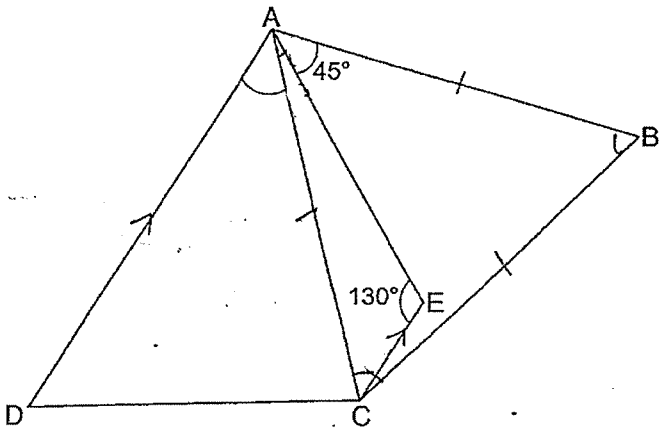
27 A piece of wire is bent to form a rectangle of area 162 cm^2. The length of the rectangle is twice its breadth. Find the breadth of the rectangle.

Ans: _____ cm

(Go on to the next page)

28 In the figure below, ABC is an equilateral triangle and AECD is a trapezium where AD // CE. Find ∠DAC.

Do not write in this space



Ans: _____ °

29 At first, Kate placed all her beads into 30 boxes with an equal number of beads in each box. 6 of the boxes were broken and the beads in these broken boxes were then placed into the remaining 24 boxes. As a result, the number of beads in each remaining box increased by 10. What was the number of beads in each box at first?

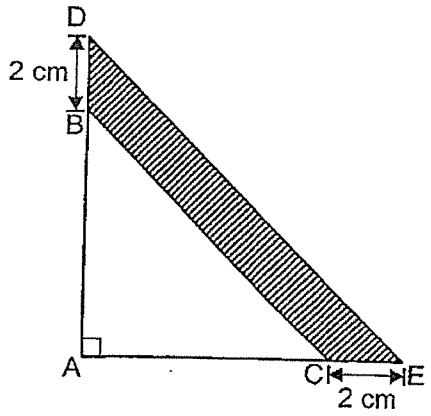
Ans: _____

(Go on to the next page)

4

30 In the figure, ABC and ADE are right-angled isosceles triangles. BD = CE = 2 cm. The area of the shaded part is 18 cm^2. Find the length of AB.

Do not write in this space



Ans: _____ cm

End of Paper 1

HENRY PARK PRIMARY SCHOOL
2020 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 2

Parent's Signature

_____

Name: _____ ( )

Class: Primary 6 F_____

55

Time for Paper 2: 1 hour 30 minutes

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are allowed to use a calculator.

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

Do not write in this space

1 Jane had some money. She spent \$15 and gave Lisa \$10. In the end, both Jane and Lisa had the same amount of money. How much more money did Jane have than Lisa at first?

Ans: \$_____

2 Mr Aziz had some apples. He sold $\frac{1}{5}$ of the apples on Monday and 80 apples on Tuesday. In the end, he was left with 30% of the apples he had at first. How many apples did he have in the end?

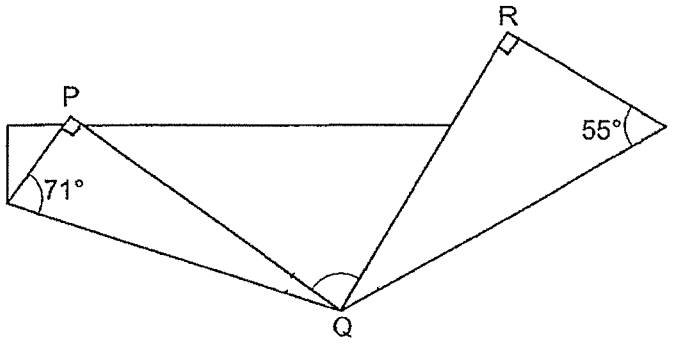
Ans: _____

3 Printer A can print 300 pages in 12 minutes while Printer B can print 300 pages in 10 minutes. If both printers are used at the same time, how many pages can they print in $\frac{1}{2}$ h?

Do not write in this space

Ans: _____

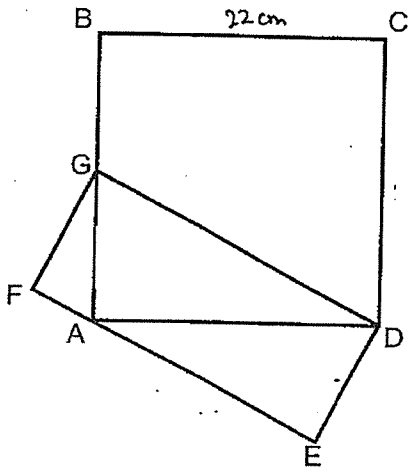
4 A rectangular piece of paper is folded at two of its corners, P and R, as shown. Find ∠PQR.



Ans: _____ °

5 The figure below is made up of square ABCD and rectangle DEFG. Given that BC = 22 cm and that G is the mid-point of AB, find the area of the figure.

Do not write in this space



Ans: _____ cm^2

For questions **6** to **17**, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

Do not write in this space

(45 marks)

6 Chin Meng earned the same amount of money each month. In October, he spent $1070 and saved the rest. The amount he spent in November was a 30% decrease from what he spent in October. As a result, his savings for November increased by 60%. How much money did Chin Meng earn each month?

Ans: _____ [3]

7 The table below shows the charges for water usage by PRB company.

Do not write in this space

Monthly Water Usage	Price per m^3
0 to 40 m^3	\$1.21
More than 40 m^3	\$1.52

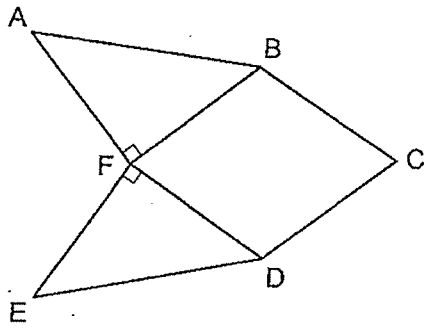
(a) Mdm Salimah's family used 40 m^3 of water in August. How much was her family charged for their water usage?

(b) Mr Muthu spent \$103.12 on water usage in September. What was the volume of water Mr Muthu used in that month?

Ans: (a) _____ [1]

(b) _____ [2]

8 The figure below is made up of rhombus BCDF and two identical right-angled isosceles triangles, ABF and EFD. The perimeter of rhombus BCDF is $12p$ cm and the length of AB is $(p + 3)$ cm.



(a) Find the perimeter of figure ABCDEF in terms of p in the simplest form.

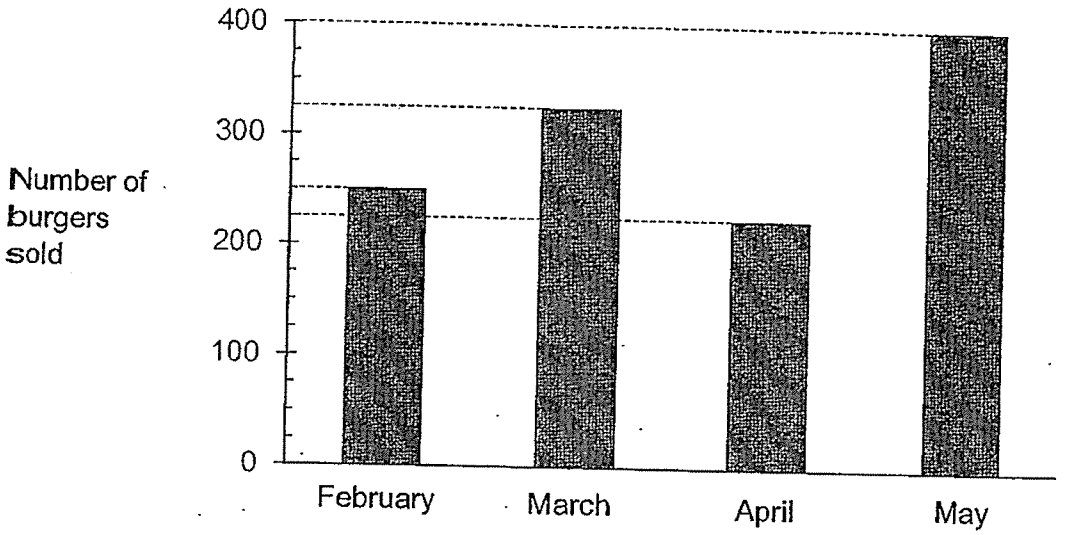
(b) Find the area of triangle ABF given that $p = 6$

Ans: (a) _____ [1]

(b) _____ [2]

9 The graph below shows the number of burgers sold by a fast food restaurant from February to May.

Do not write in this space



(a) What is the average number of burgers sold in each month from February to May?

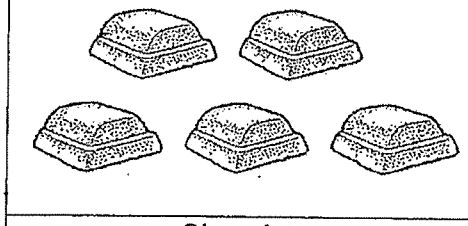
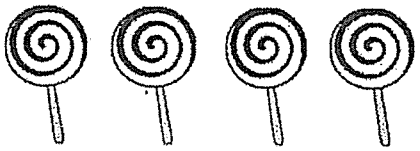
(b) Find the percentage increase in the number of burgers sold from February to March.

Ans: (a) _____ [1]

(b) _____ [2]

10 At Candyland, chocolates are only sold in packets of 5 pieces and lollipops are only sold in packets of 4 sticks at the prices shown below.

Do not write in this space

	
Chocolates 5 pieces for $1.99	Lollipops 4 sticks for $0.99

Judy spent $101.34 on some chocolates and lollipops at Candyland. She put all the chocolates and lollipops into bags such that there were 3 pieces of chocolates and 2 sticks of lollipops in each bag. How many sticks of lollipops did Judy buy from Candyland?

Ans: _____ [4]

11 In an Art Club, the number of girls is 4 times the number of boys. The number of girls who wear spectacles is $\frac{2}{5}$ the total number of children who wear spectacles in the Art Club. Given that 170 girls and 20 boys do not wear spectacles, find the total number of girls in the Art Club.

Do not write in this space

Ans: _____ [4]

12 The table below shows the prices of admission tickets to a theme park.

Do not write in this space

Type of ticket	Price per ticket
Child	$43
Adult	$55
Senior Citizen	$32

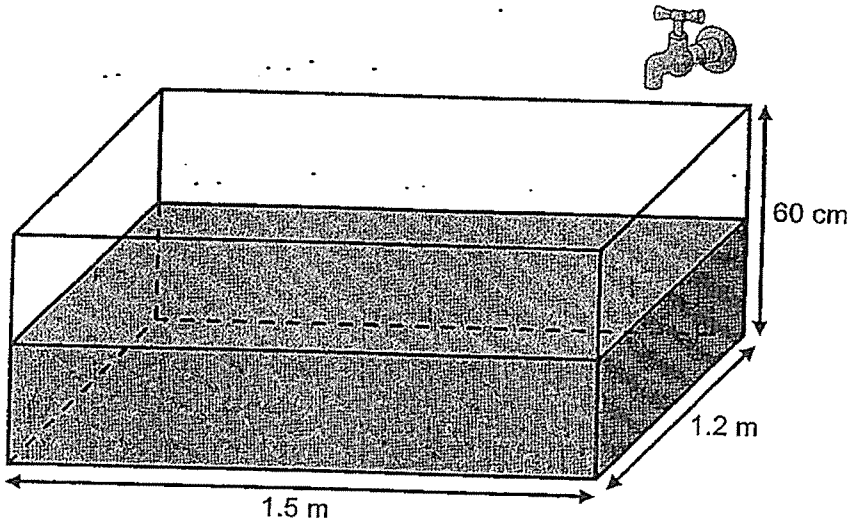
$4705

Mr Suraj paid ~~$5005~~ for admission tickets to the theme park for a group of tourists. $\frac{2}{3}$ of the tourists were children. The remaining tourists were adults and senior citizens in the ratio 5 : 2. How many children were there in the group of tourists?

Ans: _____ [3]

13 At first, a rectangular tank measuring 1.5 m by 1.2 m by 60 cm was half-filled with water as shown below. A tap was then turned on for half an hour to allow water to flow into the tank. In the end, the tank was $\frac{3}{5}$-filled. How many litres of water flowed from the tap per minute?

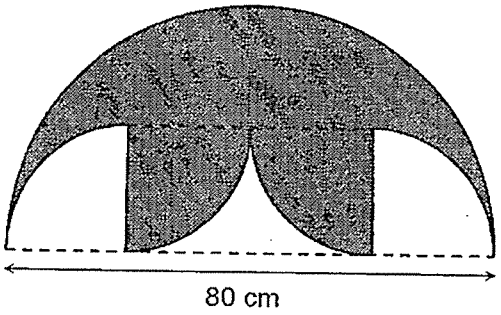
Do not write in this space



Ans: _____ [3]

14 The outline of the shaded figure below is formed by a semicircle, four identical quarter circles and two straight lines.

Do not write in this space



(a) Find the area of the shaded figure.

(b) Find the perimeter of the shaded figure.

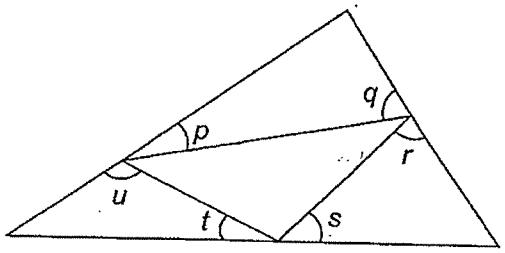
(Take $\pi = 3.14$)

Ans: (a) _____ [2]

(b) _____ [3]

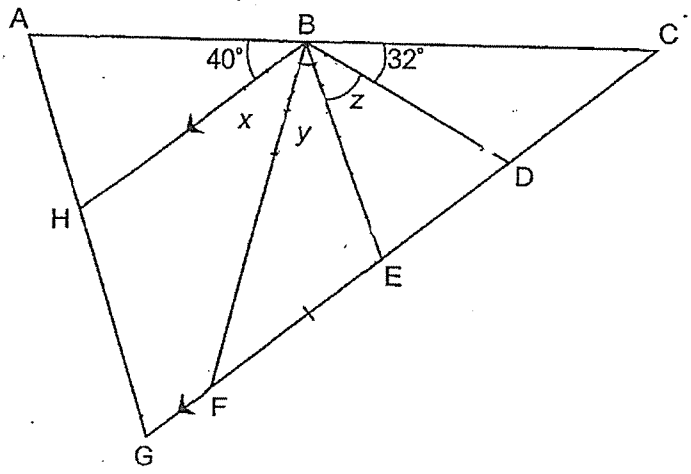
15 (a) In the figure below, find the sum of $\angle p$, $\angle q$, $\angle r$, $\angle s$, $\angle t$ and $\angle u$.

Do not write in this space



Ans: (a) _____ [1]

(b) The figure below is not drawn to scale.
In the figure, AGC is a triangle where BH // EG and BD = BE = EF.



(i) Find $\angle z$.

Ans: _____ [2]

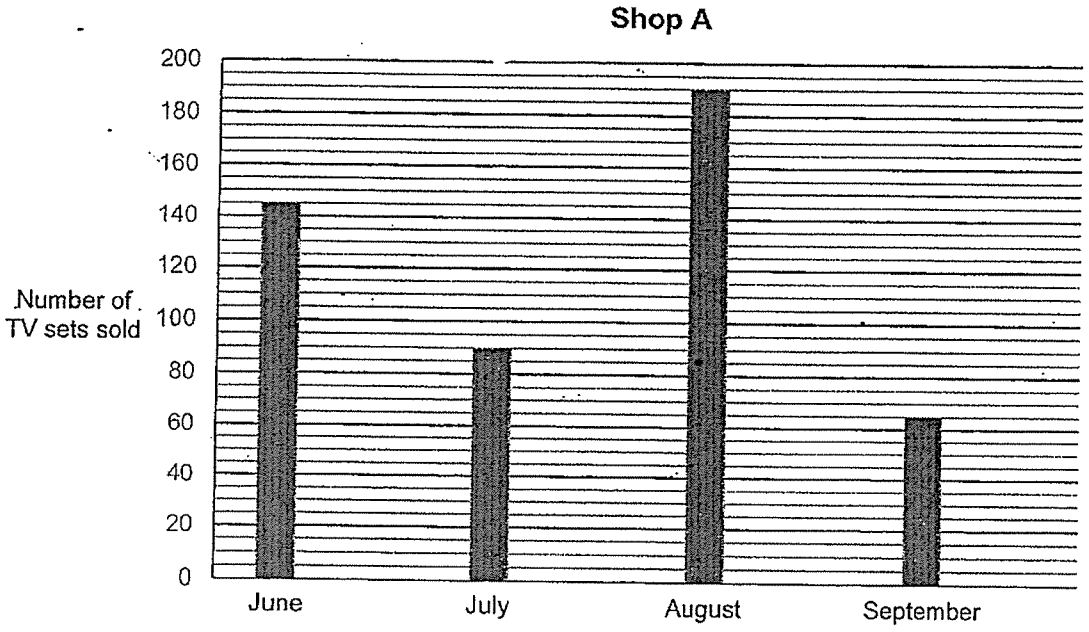
(ii) Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

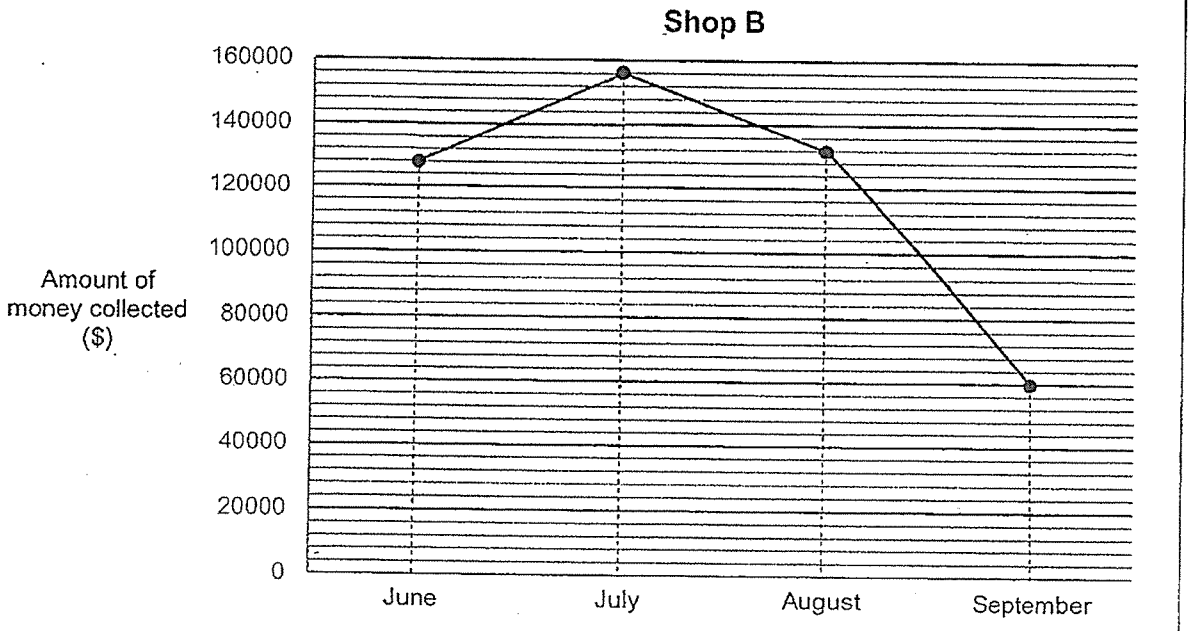
Statement	True	False	Not possible to tell
$\angle x = \angle y = \angle z$			
ABEG is a trapezium.			
$\angle AHB = \angle AGC$			

[2]

16 The graphs below show the number of television sets sold by Shop A and the amount of money collected by Shop B from the sale of television sets from June to September.

Do not write in this space





(a) Given that Shop B sold each television set at a fixed price of $1200, did it sell more, fewer or an equal number of television sets than Shop A in the month of July? Show your working clearly.

Do not write in this space

(b) Shop A had a promotion in the month of August where each television set was sold at 30% discount. Given that Shop A collected $34 250 more than Shop B in August, find the amount of discount given by Shop A for each television set sold.

Ans: (a) _____ [1]

(b) _____ [3]

17 Cedric used some sticks to form figures that follow a pattern. The first four figures are shown below.

Do not write in this space

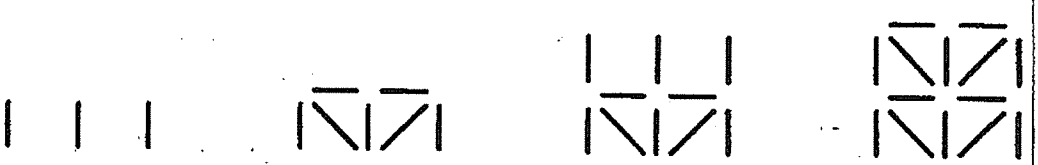


Figure 1 Figure 2 Figure 3 Figure 4

(a) The table below shows the number of sticks for the first four figures. Complete the table for Figure 5.

Figure number	Number of sticks
1	3
2	7
3	10
4	14
5	

[1]

(b) How many sticks are there in Figure 28?

(c) Cedric used 2327 sticks to form a figure. Which Figure number did he form?

Ans: (b) _____ [2]

(c) _____ [2]

End of Paper 2

Setters: Mdm Caroline Tay, Mrs Tina Tan, Mrs Norah Idil & Ms Lee Joo Lee

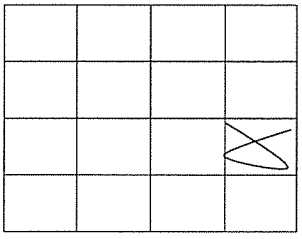
SCHOOL : HERNRY PARK PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	1	3	1	2	1	3	1	3	3

Q 11	Q12	Q13	Q14	Q15
2	2	1	2	4

PAPER 1 BOOKLET B

Q16)	5
Q17)	AF and CD
Q18)	1080 cm3
Q19)	15%
Q20)	8
Q21)	a)A and C
Q21)	b) 
Q22)	25cm
Q23)	$56
Q24)	a)(5y + 13) $4
Q25)	50
Q26)	a)24 b)3

Q27)	35°
Q28)	40
Q29)	40
Q30)	8cm

PAPER 2

Q1)	10 + 10 + 15 = $35
Q2)	30/100 = 3/10 1/5 = 2/10 1 – 2/10 – 3/10 = 5/10 80 x 2 = 160 80 x 2 = 160 3/10 x 160 = 48
Q3)	½ h = 30min 300 ÷ 12 = 25 300 ÷10 = 30 30 x 30 + 25 x 30 = 1650
Q4)	180 – 55 – 90 = 35 180 – 71 – 90 = 19 180 – 19 – 19 – 35 = 72°
Q5)	22 ÷ 2 = 11 ½ x 11 x 22 = 121 22 x 22 = 484 484 + 121 = 605cm2
Q6)	321 ÷ 60 = 5.35 5.35 x 100 = 535 535 + 100 = $1605
Q7)	a)40 x 1.21 = $48.40 b)10312 – 48.4 = 54.72 54.72 ÷ 1.52 = 36 36 + 40 = 76m3
Q8)	a)12p ÷4 = 3p 3p x 4 + (p+3) x 2 = 12p + 2p + 6 = (14p + 6)cm b)3p = 3 x 6 = 18 ½ x 18 x 18 = 162cm2

Q9)	a)250 + 325 + 225 + 400 = 1200 1200 ÷ 4 = 300 b)325 – 250 = 75 75/250 x 100% = 30%
Q10)	10 x 3 = 30 10 x 2 = 20 20 ÷ 4 = 5 30 ÷5 = 6 6 x 1.99 + 5 x 0.99 = 16.89 101.34÷16.89 = 6 6 x 20 = 120.
Q11)	$20x$ – 170 = 2/5 x ($20x$ – 170) + ($5x$ – 20) $20x$ = 170 = 2/5 x ($25x$ – 190) $20x$ – 170 = $10x$ – 76 $20x$ = $10x$ + 94 $10x$ = 94 $20x$ = 94 x 2 = 188
Q12)	(14 x 43) + (5 x 55) + (2 x 32) = 941 4750 ÷941 = 51 5 x 14 = 70
Q13)	3/5 x 60 x 150 x 120 = 648000 648000 – 540000 = 108000 108000cm3 = 108ℓ 108 ÷ 30 = 3.6ℓ
Q14)	a)80 ÷ 4 =20 20 x 2 = 40 20 x 40 = 800 ½ x 3.14 x 40 x 40 = 2512 2512 – 800 = 1712cm2 b)3.14 x 40 = 125.6 125.6 + 20 + 20 = 165.6 125.6 + 165.6 = 291.2cm
Q15)	a)180 x 3 = 540 540 – 180 = 360° b)i)180 – 32 – 40 = 108 180 – 108 = 72 Z = 180 – 72 – 72 = 36°

	ii) Not True
Q16)	a)156000 ÷ 1200 = 130 More b)132000 + 34250 = 166250 166250 ÷ 70 x 30 = 71250 71250 ÷ 190 = $375
Q17)	a)17 b)3 + 4 = 7 21 (7 x 11) = 98 c)2327 ÷7 = 332 R3 332 x 2 = 664 664 + 1 = 665

NANYANG PRIMARY SCHOOL

PRELIMINARY EXAMINATION 2020

PRIMARY 6

MATHEMATICS PAPER 1 (BOOKLET A)

Total Duration for Booklets A and B: 1 hour

Additional materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. The use of calculators is **NOT** allowed.

Name: _____ ( )

Class: Primary 6 ( )

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet. (20 marks)

---

1 Which of the following numbers is 12 000 when rounded to the nearest hundred?

(1) 11 908

(2) 11 950

(3) 12 089

(4) 12 095

2 4 tens and 28 hundredths is _____.

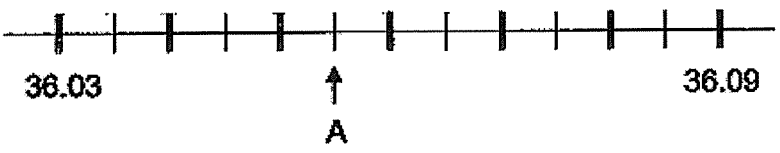
(1) 40.28

(2) 40.028

(3) 4.280

(4) 4.028

3 In the scale below, what is the value of A?



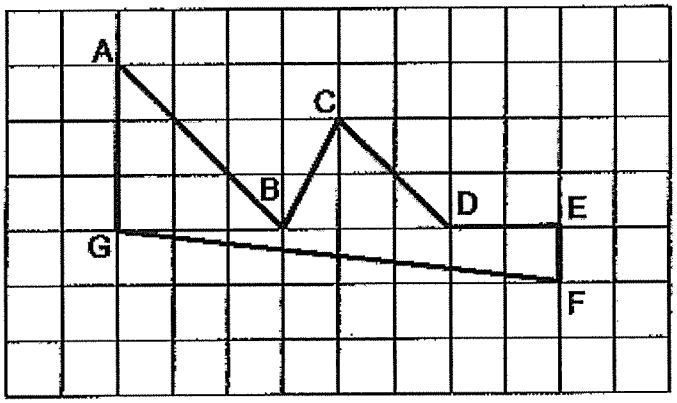
(1) 36.035

(2) 36.051

(3) 36.055

(4) 36.550

4 Which pair of lines is parallel?



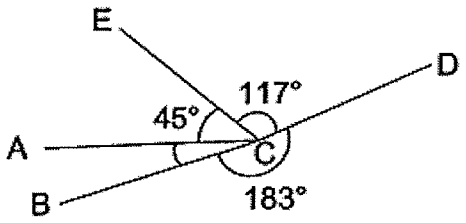
(1) DE and EF

(2) AG and BC

(3) AB and CD

(4) CD and FG

5 In the figure below, $\angle BCD = 183°$, $\angle ECD = 117°$ and $\angle ACE = 45°$. Find $\angle BCA$.



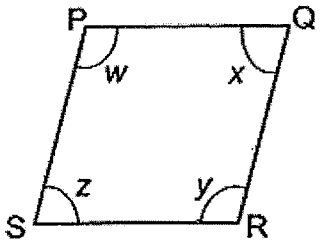
(1) 15°

(2) 18°

(3) 35°

(4) 60°

6 In the figure below, PQRS is a rhombus.



Which of the following statements is **false**?

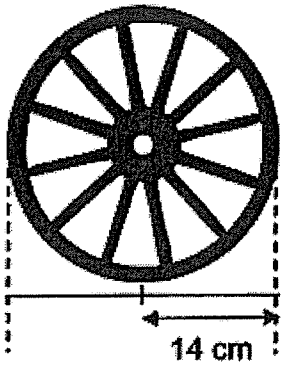
(1) $\angle w = \angle y$

(2) PQ = PS

(3) PQ // SR

(4) $\angle x + \angle z = 180°$

7 A wheel of radius 14 cm made 10 complete turns. Find the distance covered. Take $\pi = \frac{22}{7}$



(1) 440 cm

(2) 880 cm

(3) 1760 cm

(4) 6160 cm

8 Mrs Field sold $(6n + 1)$ coconuts on Monday. She sold n more coconuts on Tuesday than on Monday. How many coconuts did she sell altogether?

(1) $7n + 1$

(2) $11n + 2$

(3) $13n + 1$

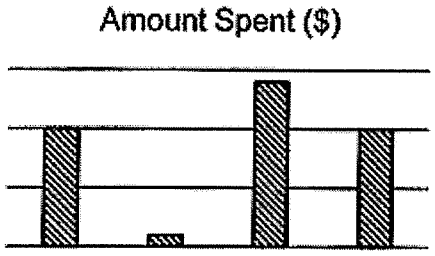
(4) $13n + 2$

9 The table below shows how Megan spent her money.

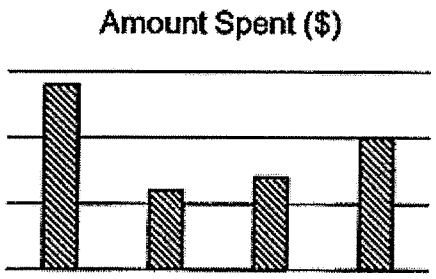
	Magazine	Story Book	Eraser	Pencil Case
Amount spent ($)	6	10	10	14

Which of the following bar graph best represents Megan's spending?

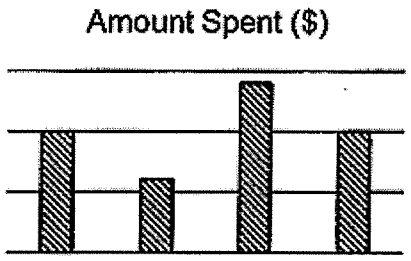
(1)



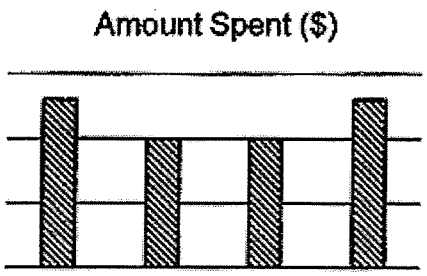
(2)



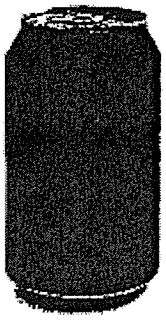
(3)



(4)



10 Which of the following is likely to be the volume of a can of soft drink?



(1) 3.3 ml

(2) 33 ml

(3) 330 ml

(4) 3300 ml

11 Which of the following fractions is nearest to $\frac{2}{3}$?

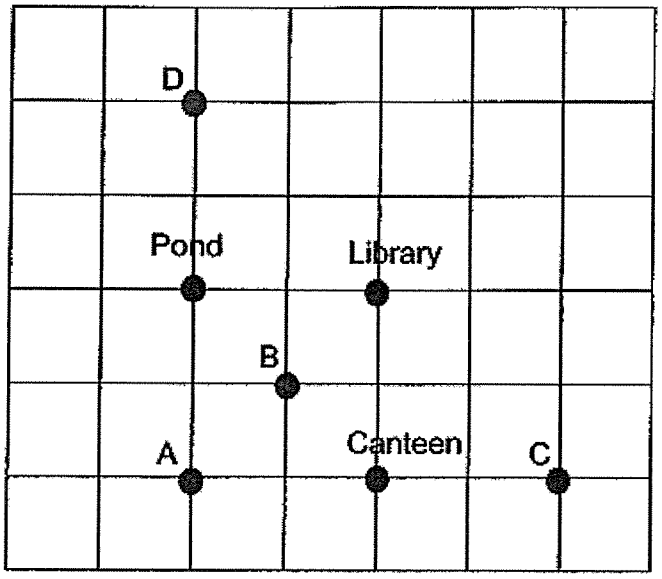
(1) $\frac{3}{4}$

(2) $\frac{5}{6}$

(3) $\frac{7}{9}$

(4) $\frac{1}{3}$

12 Seven landmarks on a map of a school are shown in the square grid below. The library is north of the pond. Samad is standing at a location south-east of the library and south of the canteen. Which landmark is Samad standing at?



(1) A

(2) B

(3) C

(4) D

13 Two of Object B are placed into a beaker on a weighing scale as shown in Figure 1. Object A is placed into an identical beaker as shown in Figure 2. Object A and Object B are placed into an identical beaker as shown in Figure 3. Find the mass of the empty beaker.

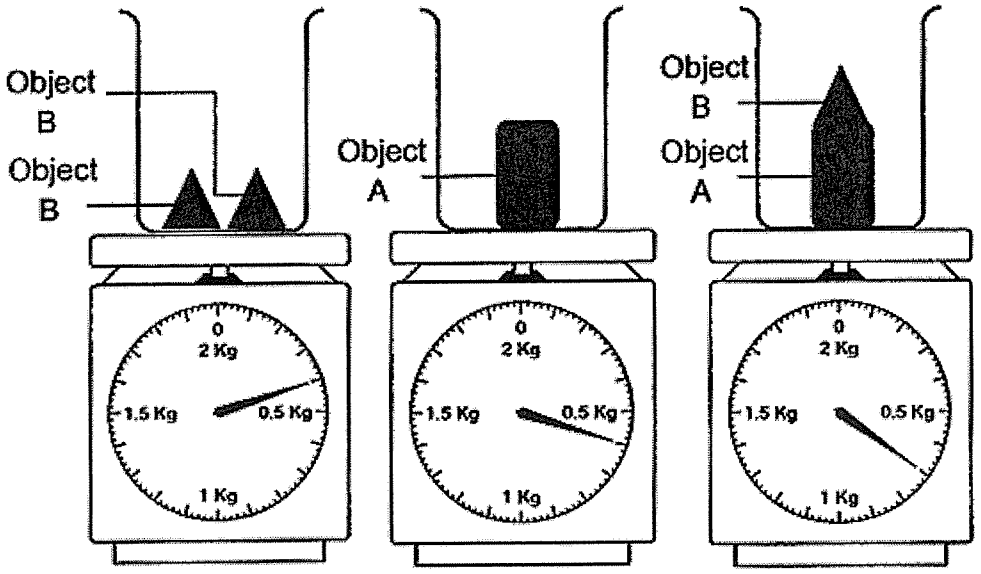


Figure 1 Figure 2 Figure 3

(1) 0.1 kg

(2) 0.2 kg

(3) 0.3 kg

(4) 0.4 kg

14 At a fruit stall, the price of 3 mangoes is the same as the price of 5 grapefruits. The price of 3 mangoes is also the same as the price of 10 pears. What is the ratio of the price of a mango to the price of a grapefruit to the price of a pear?

(1) 3 : 10 : 5

(2) 3 : 5 : 10

(3) 10 : 3 : 6

(4) 10 : 6 : 3

15 A repeated pattern is formed using the numbers 0, 1 and 2. The first 18 numbers are shown below.

2	0	2	1	2	0	2	0	2	1	2	0	2	0	2	1	2	0
1st		2nd	3rd														18th

What is the sum of the first 100 numbers?

(1) 125

(2) 117

(3) 116

(4) 113

NANYANG PRIMARY SCHOOL

PRELIMINARY EXAMINATION 2020

PRIMARY 6

MATHEMATICS PAPER 1 (BOOKLET B)

Total Duration for Booklets A and B: 1 hour

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of calculators is **NOT** allowed.

Name: _____ ( )

Class: Primary 6 ( )

Booklet B	24 / 25

Please sign and return the paper the next day. Any queries should be raised at the same time when returning the paper.

Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

---

16 Find the value of $\frac{5}{6} \times 24$

Ans: _____

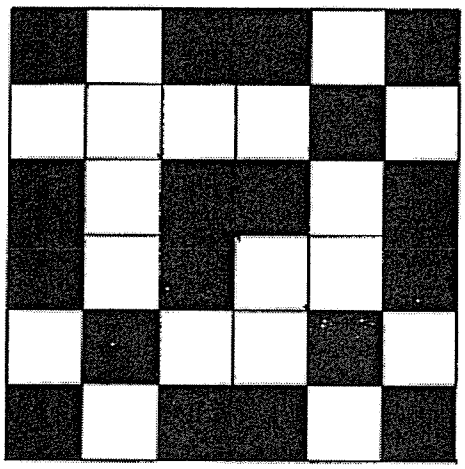
---

17 Express 735 ml in litres.

Ans: _____ _____ ℓ

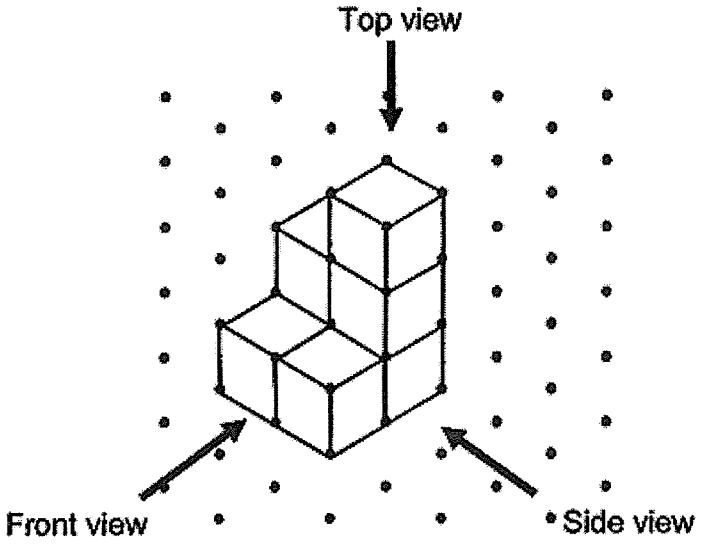
---

18 There is 1 line of symmetry for the figure below. Draw in the line of symmetry.



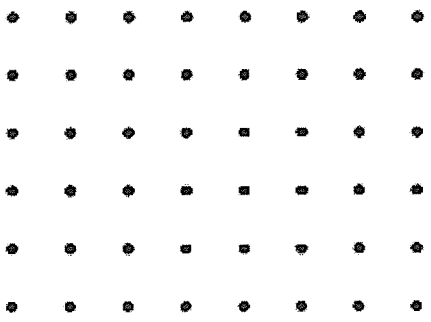
---

19 Yong Yi stacked 7 unit cubes and glued them together to form the solid below.

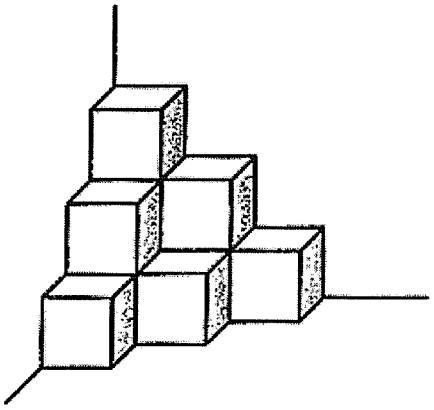


Draw the side view of the solid on the grid below.

Side view



20 The solid below is made up of 1-cm cubes. What is the volume of the solid?



Ans: _____ cm^3

Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

---

21 Write down all the common factors of 12 and 18.

Ans: _____

---

22 Mdm Hafiz bought a table for $151.25 and a chair for $24.15.

(a) How much did she spend altogether?

(b) Find the cost of 20 such tables.

Ans: (a) $_____

(b) $_____

---

23 Michelle started reading her book at 8.56 a.m. She stopped reading her book at 10.05 a.m. on the same day. How long did Michelle spend reading her book?

Ans: _____ h _____ min

---

24 Mrs Tay baked 120 cookies on Monday and 150 cookies on Tuesday. What was the percentage increase in the number of cookies baked on Tuesday compared to Monday?

Ans: _____ %

---

25 Nayla divided some beads equally into 2 groups. She packed the first group of beads equally into 4 boxes and the second group of beads equally into 6 packets. 2 such boxes and 5 such packets contained a total of 6016 beads. How many beads were there in one such packet?

Ans: _____

---

26 Calissa had a piece of cloth. She used $\frac{1}{5}$ m of it to sew a handkerchief and $\frac{3}{5}$ m of it to sew a pouch. She then had $\frac{1}{4}$ m of the cloth left. What was the length of the piece of cloth Calissa had at first?

Ans: _____ m

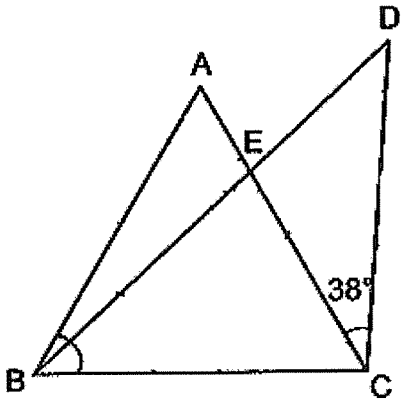
---

27 Kyan had 5 kg of salt. He packed the salt into bags. Each bag contained $\frac{3}{8}$ kg of salt. What was the greatest number of such bags of salt Kyan could have packed?

Ans: _____

---

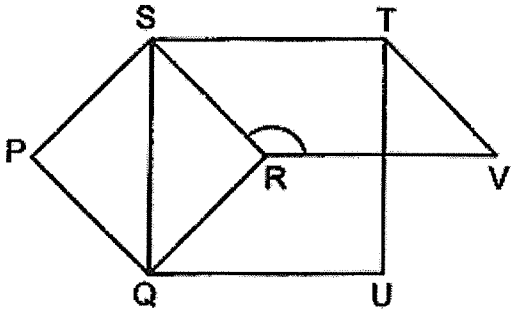
28 In the figure, ABC is an equilateral triangle. AB = CD and ∠ACD = 38°
BED and AEC are straight lines. Find ∠AEB.



Ans: _____°

---

29 In the figure, PQRS and STUQ are two squares. STVR is a parallelogram. Find ∠SRV.



Ans: _____°

---

30 The table shows the number of toys produced by a factory from Monday to Sunday.

Day	Number of toys produced
Monday to Friday	$2y$ per day
Saturday	$4y - 3$
Sunday	$6y + 8$

Find the total number of toys produced in a week given that $y = 5$.

Ans: _____

End of Paper

NANYANG PRIMARY SCHOOL

PRELIMINARY EXAMINATION 2020

PRIMARY 6

MATHEMATICS PAPER 2

Duration: 1 hour 30 minutes

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of an approved calculator is expected, where appropriate.

Name: _____ ( )

Class: Primary 6 ( )

Parent's Signature: _____

Booklet A	**/ 20**
Booklet B	**/ 25**
Paper 2	**/ 55**
Total	**/ 100**

Please sign and return the paper the next day. Any queries should be raised at the same time when returning the paper.

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

---

1 Carel had $(5k + 13)$ shells at first. She added k more shells and the total number of shells she had became 151. How many shells did Carel add?

Ans: _____

---

2 Every minute, Machine A prints 3 pages. Every hour, Machine A and Machine B print a total of 450 pages. How many pages does Machine B print per hour?

Ans: _____

---

3 The average of four different 2-digit odd numbers is 27. Two of the numbers are 15 and 29. What could the other two numbers be?

Ans: _____, _____

---

4 Diana was given $30 to buy some cupcakes from a bakery.

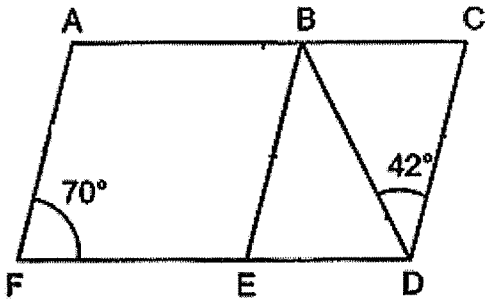
$2 each
30% discount for every 10 cupcakes

What was the greatest number of cupcakes Diana could buy with all her money?

Ans: _____

---

5 ACDF and BCDE are parallelograms. ∠AFE = 70° and ∠CDB = 42°. Find ∠BDE.



Ans: _____ °

For questions **6** to **17**, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

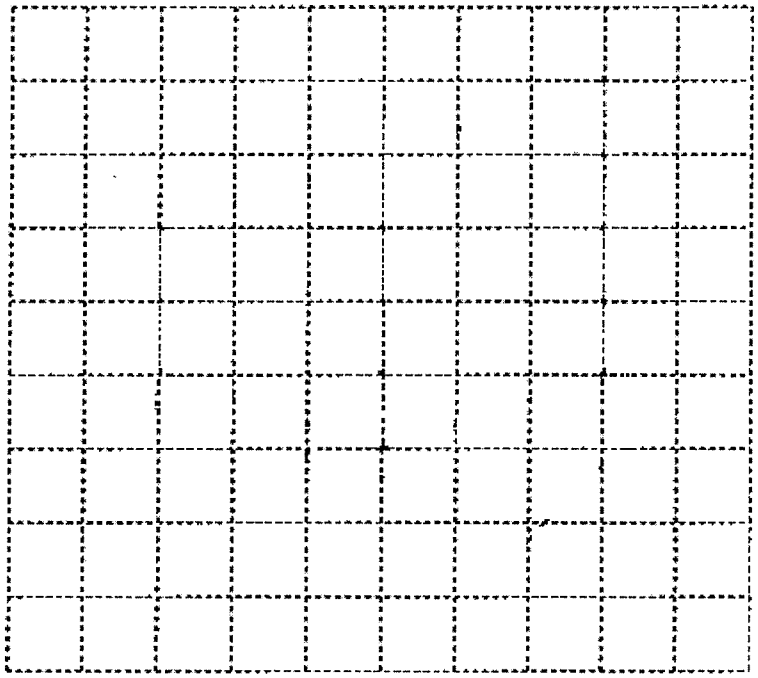
---

6 In the square grid below, JK and KL are straight lines.

(a) Measure and write down the size of ∠JKL.

(b) JK and KL form two sides of a trapezium JKLM. JM is parallel to KL. KL is twice the length of JM. Complete the drawing of trapezium JKLM.

(c) KL forms one side of a parallelogram KLNP. The length of JP is twice the length of KP and JKP forms a straight line. Complete the drawing of parallelogram KLNP such that it does not overlap with the trapezium.



[2]

Ans: (a) _____ [1]

---

7 Heidi bought 4 staplers and 6 files. Each stapler cost $1.20 more than each file. The total cost of the files was $6.40 more than the total cost of the staplers. Find the cost of one stapler.

Ans: _____ [3]

---

8 Maggie baked some pies and muffins. The number of pies was $\frac{7}{11}$ of the number of muffins. Maggie gave away 6 pies and 14 muffins. In the end, the number of pies left was equal to the number of muffins left. How many pies and muffins did Maggie bake altogether?

Ans: _____ [3]

---

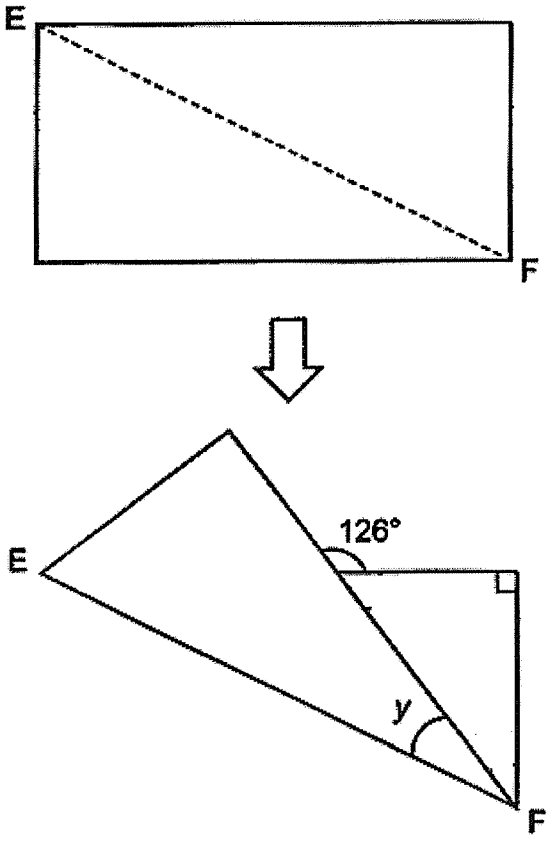
9 Three children received their scores for a Mathematics test. The average scores of any two of the three children are listed below.

Average Scores
83
86
94

What was the highest score among the three children?

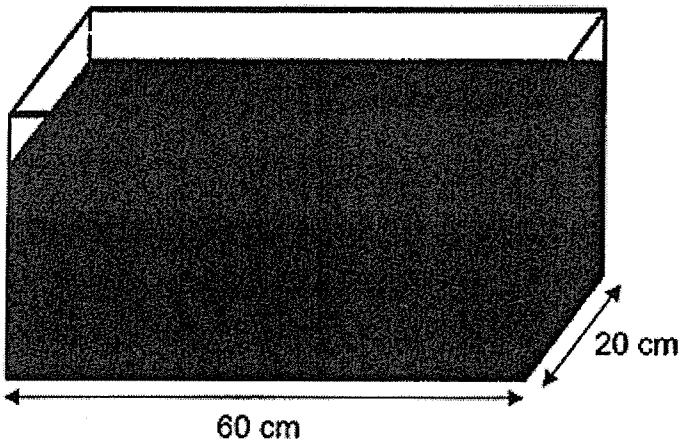
Ans: _____ [3]

10 Susie had a rectangular piece of paper. She folded the piece of paper along the line EF. Find $\angle y$.



Ans: _____ [3]

11 A rectangular tank measuring 60 cm long and 20 cm wide was $\frac{4}{5}$ - filled with water at first. After Matthias poured some water from the tank into some identical jugs, the height of the water level decreased by 18 cm. Each jug can hold at most 2.25 ℓ of water.



(a) What was the least number of such jugs used?

Ans: (a) _____ [3]

(b) Each of the statements below is either true, false or not possible to tell from the information given.
For each statement, put a tick (√) to indicate your answer.

Statement	True	False	Not possible to tell
20% of the tank was not filled with water at first.			
The height of the tank is 22 cm.			

[1]

12 Edwina and Georgia had the same number of bottles. Edwina and Georgia each had a mix of big bottles and small bottles. Edwina had 5 small bottles while Georgia had 16 big bottles. Each small bottle had a capacity of 400 ml. Each big bottle had a capacity of 0.6 ℓ. The total capacity of Edwina's bottles was 0.8 ℓ more than the total capacity of Georgia's bottles.

(a) How many big bottles did Edwina have?

(b) What was the total capacity of Edwina's bottles?

Ans: (a) _____ [3]

(b) _____ [1]

13 The table below shows the number of pupils who wear glasses in Primary 3A and the number of girls who wear glasses in Primary 3B. The number of boys who wear glasses in Primary 3B is not shown. The total number of pupils in each class is fewer than 40.

Class	Gender	Number of pupils who wear glasses
3A	Boys	12
	Girls	11
3B	Boys	?
	Girls	10

(a) The total number of pupils in Primary 3A can be divided equally into 4 groups with no pupils leftover. The total number of pupils in Primary 3A can also be divided equally into 6 groups with no pupils leftover. There are 2 girls in Primary 3A who do not wear glasses. How many boys in Primary 3A do not wear glasses?

(b) The total number of boys in Primary 3B is $\frac{5}{8}$ of the total number of pupils in Primary 3B. How many girls in Primary 3B do not wear glasses?

Ans: (a) _____ [2]

(b) _____ [2]

14 There were three types of fruit in a box. The ratio of the number of mangoes to the total number of apples and oranges was 2 : 5. The ratio of the number of apples to the number of oranges was 9 : 1. There were 30 more apples than mangoes. After some mangoes were added into the box, 70% of the fruits in the box were mangoes.

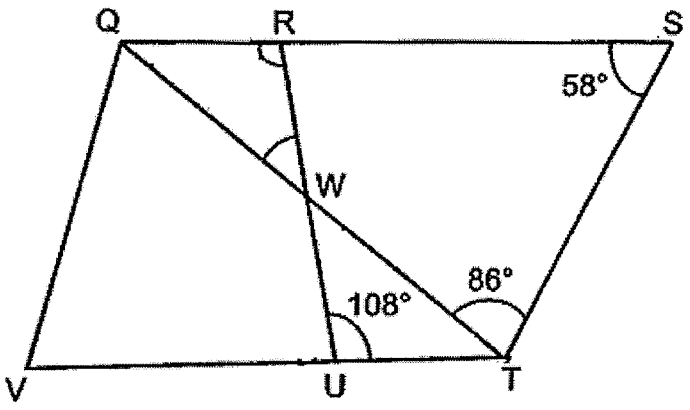
(a) How many mangoes were there in the end?

(b) How many mangoes were added in the box?

Ans: (a) _____ [3]

(b) _____ [1]

15 QRUV and RSTU are trapeziums. QRS, VUT and QWT are straight lines. QS is parallel to VT. $\angle QST = 58°$, $\angle STQ = 86°$ and $\angle RUT = 108°$.



(a) Find $\angle RWQ$.

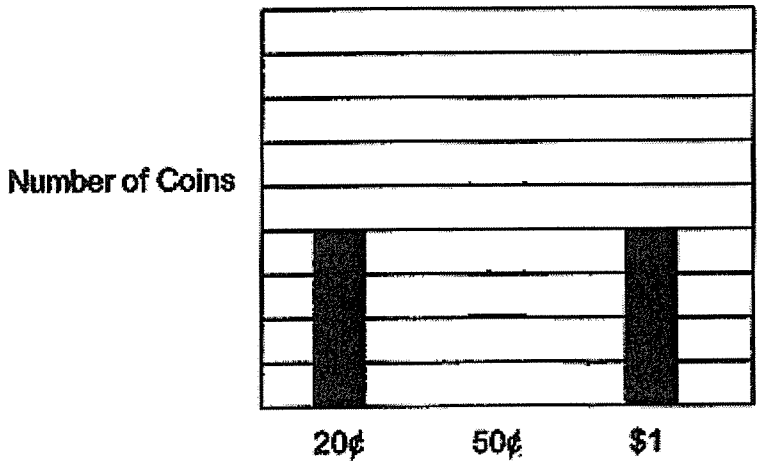
Ans: (a) _____ [2]

(b) In the following statement, circle the words that describe QRW correctly and fill in the blanks accordingly:

QRW **(is / is not)** an isosceles triangle because
$\angle$ RQW **(is / is not)** equal to $\angle RWQ$

Show your working clearly to explain your answer. [2]

16 The bar graph below shows the types of coin that Max had in his piggy bank. The number of 50¢ coins he had was not shown in the graph.



[3]

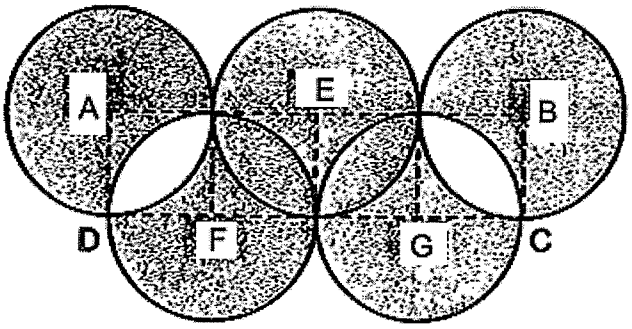
He had $44 altogether. The total amount of $1 coins that he had was $16 more than the total amount of 20¢ coins that he had.

(a) How many 20¢ coins did he have?

(b) Draw the bar for the number of 50¢ coins that Max had in the graph above.

Ans: (a) _____ [2]

17 The figure is made up of 5 identical circles. AEBGF are centres of the circles. The area of rectangle ABCD is 400 cm^2.



(a) Find the radius of the circle.

(b) Find the area of the shaded parts.
Take $\pi = 3.14$

Ans: (a) _____ [1]

(b) _____ [4]

End of Paper

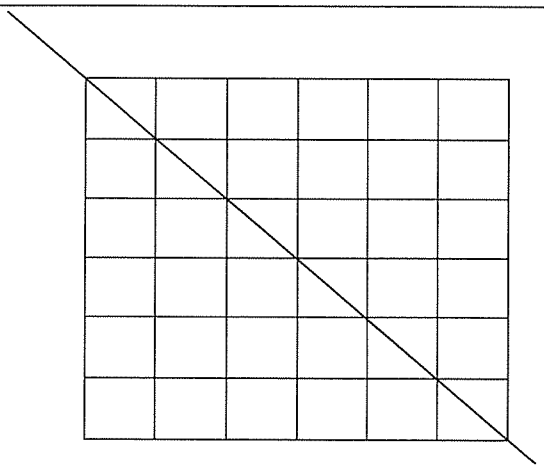
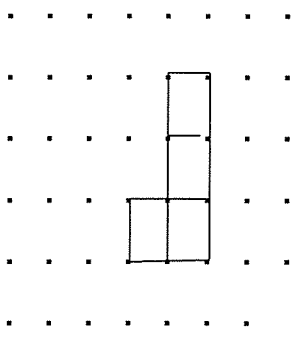
SCHOOL : NANYANG PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

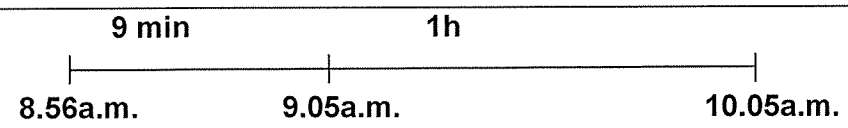
PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	1	3	3	1	4	2	4	3	3

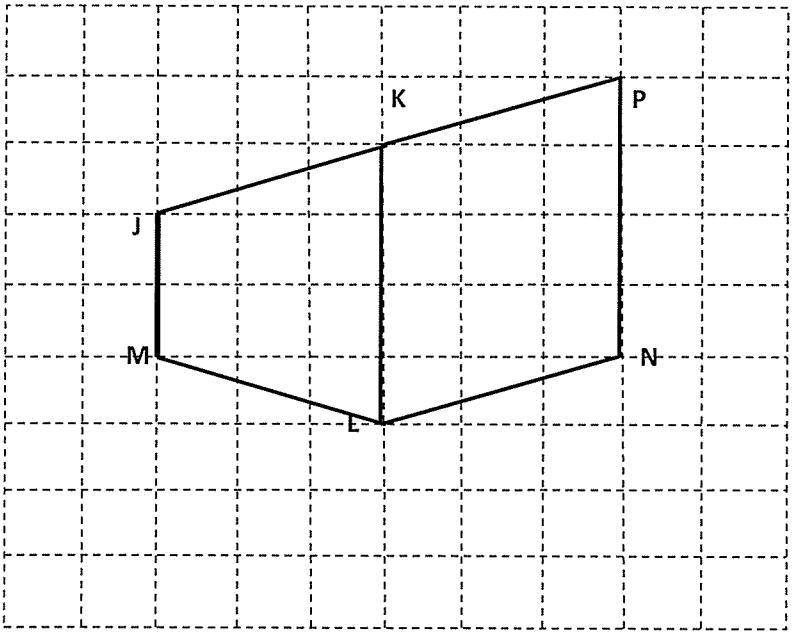
Q 11	Q12	Q13	Q14	Q15
1	1	2	4	2

PAPER 1 BOOKLET B

Q16)	20
Q17)	0.735ℓ
Q18)	
Q19)	

Q20)	6 + 3 + 1= 10 cm3
Q21)	12: 1x12, 2x6, 3x4 18: 1x18, 2x9, 3x6 ANS: 1,2,3,6
Q22)	a)$151.25 + $24.15 = $175.40 b)$151.25 x 20 = $3025
Q23)	 ANS: 1 h 9 min
Q24)	150 – 120 = 30 $\frac{30}{120}$ x 100% = 25%
Q25)	4B→6p 2B+5p = 6016 4B+10p→12032 6p+10p→12032 16p→12032 p→12032 ÷ 16 = 752
Q26)	$\frac{1}{5} + \frac{3}{5} + \frac{1}{4} = \frac{4}{12} + \frac{12}{20} + \frac{5}{20} = \frac{21}{20}$ m
Q27)	$5 \div \frac{3}{8} = 5 \times \frac{8}{3} = \frac{40}{3} = 13\frac{1}{3} \approx 13$
Q28)	180° ÷3 = 60° (180° – 38° – 60°) ÷ 2 = 41° 180° – 60° – 41° = 79° 180° – 79° = 101°
Q29)	90° ÷2 = 45° 180° – 45° = 135°
Q30)	Total→(2yx5) + 4y – 3 + 6y + 8 = 100 + 5 = 105

PAPER 2

Q1)	5k + 13 + k = 6k + 13 6k→151 – 13 = 138 k→138 ÷ 6 = 23
Q2)	1h = 60min 3 x 60 = 180 450 – 180 = 270
Q3)	27 x 4 = 108 (37+27+15+29) ÷ 4 = 27 108 – 15 – 29 = 64 37 + 27 = 64 ANS: 37 , 27
Q4)	1 set→($2 x 10) x (100% - 30%) = $14 No.of sets→$30 ÷ $14 = 2 R $2→1 cupcake 2 x 10 + 1 = 21
Q5)	180° – 70° – 42° = 68°
Q6)	a)71° 

Q7)	1S→1F + $1.20 4S→4F + $4.80 6F→4F + $4.80 + $6.40 2F→$4.80 + $6.40 = $11.20 1F→$11.20 ÷ 2 = $5.60 1S→$5.60 + $1.20 = $6.80
Q8)	11u – 7u = 4u 4u→14 – 6 = 8 u→8 ÷ 4 = 2 7u + 11u = 18u 18u→2 x 18 = 36
Q9)	83 x 2 = 166 86 x 2 = 172 94 x 2 = 188 166 + 172 + 188 = 526 526 ÷ 2 = 263 (total) Highest : 95 / 96 / 97 263 – 97 = 166 188 – 97 = 91 166 – 91 = 75 (75 + 91) ÷ 2 = 83 (97 + 75) ÷ 2 = 86 ANS: 97
Q10)	180° – 126° = 54° 180° – 90° – 54° = 36° (90° – 36°) ÷2 = 27°
Q11)	a)60 x 20 x 18 = 21600 21600cm3 = 21.6 ℓ 21.6 ℓ ÷ 2.25 ℓ ≈ 10 b)True False
Q12)	a)20 b)14000ml
Q13)	a)11 + 12 + 2 = 25 36 – 25 = 11 b)2

Q14)	a)M : A 2 : 5 X2 x2 4 : 10 A = 0 9 = 1 5u→30 1u→30÷5 = 5 = 6 4u→6 x 4 = 24 (m) 10u→6 x 10 = (A +0) 30% →60 1% →$\frac{60}{30}$ = 2 70% →2 x 70 = 140 b)140 – 24 = 116 A : 0 : total 9 : 1 : 10
Q15)	a)36 ° b)is / is
Q16)	a)$1 - $0.20 = $0.80 $16 ÷ $0.80 = 20 b)20 x $0.20 = $4 20 x $1 = $20 $44 - $20 - $4 = $20 (50¢) $20 ÷0.50 = 40
Q17)	a)400 ÷ 4 = 100 $\sqrt{100}$ = 10cm b) ¼ x 3.14 x 25 = 78.5 78.5 – 50 = 28.5 (half leaf) 28.5 x 2 = 57 (1 leaf) 2 + 3 →12 78.5 x 12 = 942 942 + 285 = 1228cm2

RAFFLES GIRLS' PRIMARY SCHOOL
PRELIMINARY EXAMINATION
MATHEMATICS (PAPER 1)
PRIMARY 6

Name: _____( )

Form Class: P6 _____ Math Teacher :

Date: 19 Aug 2020 Duration: 1 hour

Your Paper 1 Score (Out of 45 marks)	
Your Paper 2 Score (Out of 55 marks)	
Your Total Score (Out of 100 marks)	
Parent's Signature	

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. **NO** calculator is allowed for this paper.

Questions **1** to **10** carry 1 mark each. Questions **11** to **15** carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade your answer (1, 2, 3 or 4) on the OAS provided.
All diagrams are not drawn to scale. (20 marks)

---

1. The value of the digit 5 in 954 687 is _____.

   (1) 500

   (2) 5000

   (3) 50 000

   (4) 500 000

2. Which one of the following is closest to 1?

   (1) $1\frac{1}{7}$

   (2) $1\frac{1}{6}$

   (3) $1\frac{1}{9}$

   (4) $1\frac{1}{8}$

3. Round off 28 784 to the nearest tenth.

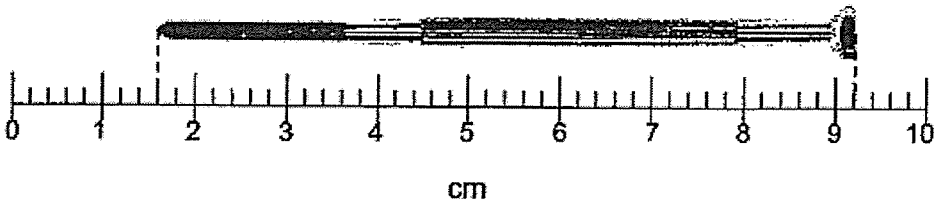
   (1) 28.7

   (2) 28.8

   (3) 29.0

   (4) 30.0

4. What is the length of the screw driver?



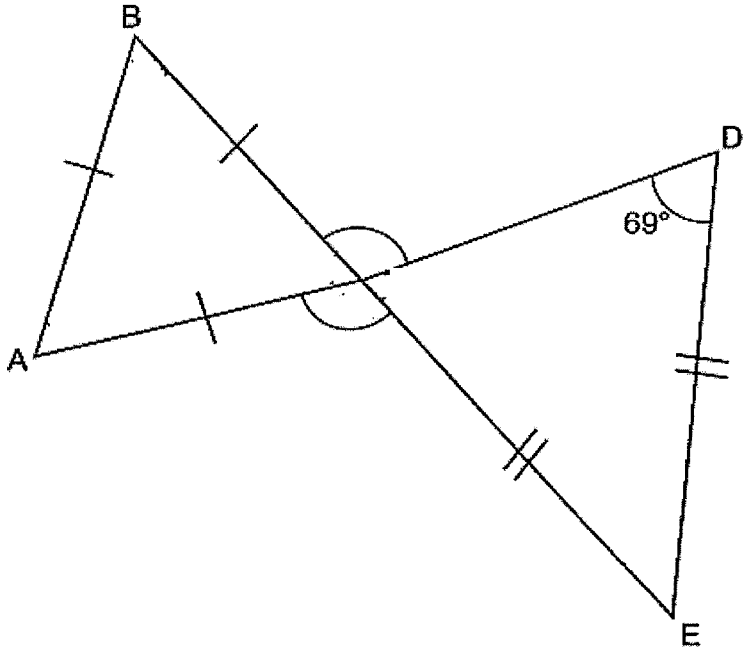
(1) 7.3 cm

(2) 7.6 cm

(3) 9.1 cm

(4) 9.2 cm

5. In the figure, ABC is an equilateral triangle. CDE is an isosceles triangle. BCE is a straight line. $\angle CDE = 69°$. Find the sum of $\angle BCD$ and $\angle ACE$.



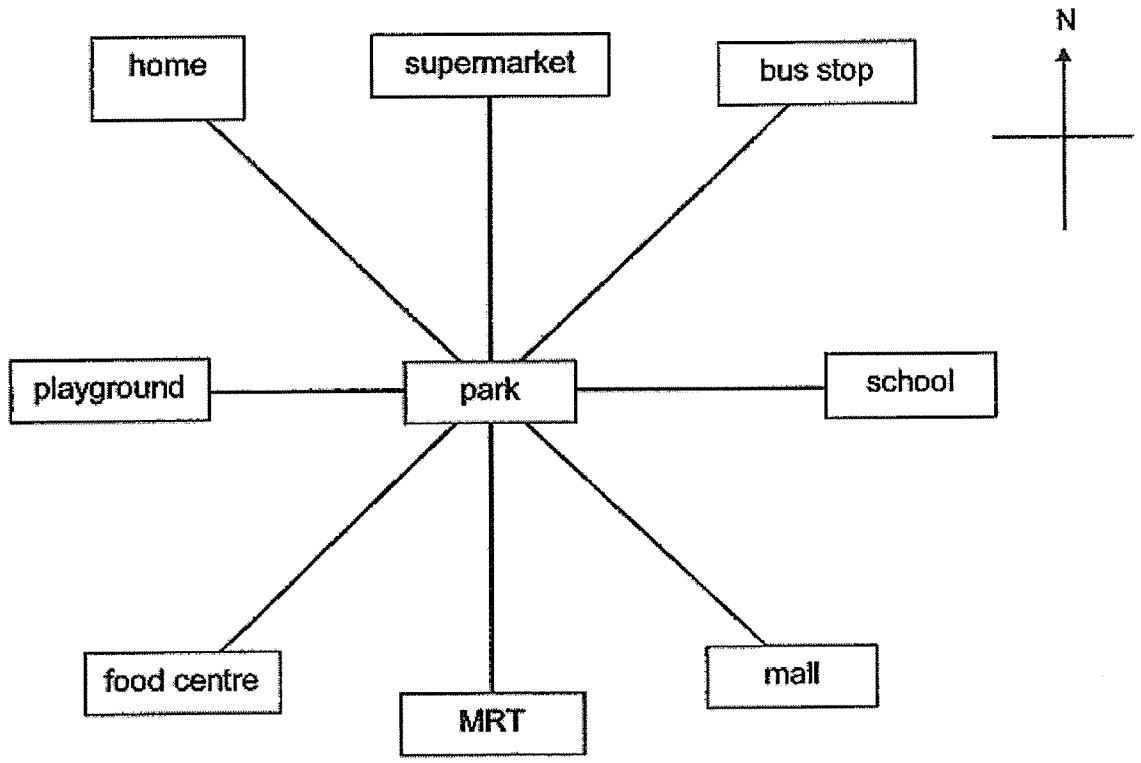
(1) 129°

(2) 222°

(3) 231°

(4) 240°

6. Gordon was at the park. He turned an angle of 315° anti-clockwise to face the direction of his home. Where was he facing before the turn?



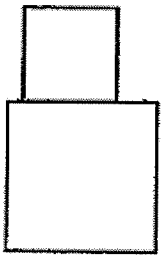
(1) playground

(2) supermarket

(3) food centre

(4) bus stop

7. The figure is made up of 2 squares. The area of the 2 squares are 64 cm^2 and 25 cm^2. What is the perimeter of the figure?



(1) 42 cm

(2) 47 cm

(3) 52 cm

(4) 89 cm

8. Abel had 3 times as many books as Thomas. Abel donated $\frac{1}{4}$ of his books to charity. What was the ratio of the number of books Thomas had to the number of books Abel had in the end?

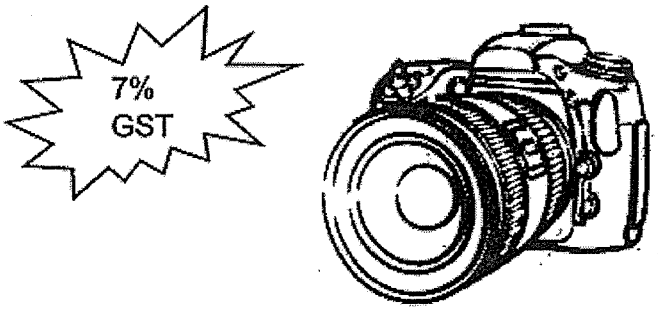
(1) 3 : 4

(2) 4 : 9

(3) 9 : 4

(4) 9 : 7

9. Calvin bought a camera. The GST amount was $70. How much did he pay for the camera inclusive of GST?



(1) $107

(2) $170

(3) $1000

(4) $1070

10. $3 + 6a = 27$. What is the value of a?

(1) 180

(2) 144

(3) 5

(4) 4

11. Ai Lin bought 2 tables and 20 chairs for her office. She spent $120 more on the tables than the chairs. She spent a total of $840. How much did she spend on one chair?

(1) $18

(2) $24

(3) $180

(4) $360

12. $\frac{1}{2}$ of Janice's mass is the same as $\frac{1}{5}$ of Randy's mass.

Their total mass is 49.14 kg. Find Janice's mass.

(1) 7.02 kg

(2) 14.04 kg

(3) 14.4 kg

(4) 35.1 kg

13. A dining table was sold at a discount. The discounted price was 20% less than the usual price. The usual price was $720. How much was the discount?

(1) $20

(2) $120

(3) $144

(4) $576

14. Ali and Zainal each bought the same mass of minced meat. They prepared each patty with the same mass of minced meat. Ali made 20 patties and had 5.6 kg of minced meat left. Zainal made 60 patties and had 400 g of minced meat left. What was the mass of minced meat used for each patty?

(1) 65 g

(2) 75 g

(3) 130 g

(4) 150 g

15. Tap A can fill a pail in 6 min. Tap B can fill the same pail in 3 min. How long would it take to fill the pail completely when both taps are turned on at the same time?

(1) 0.5 min

(2) 2 min

(3) 4.5 min

(4) 9 min

Questions **16** to **20** carry **1** mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (5 marks)

---

16. Find the value of $50 - (24 \div 2 \times 3) + 4$.

Ans: _____

17. When a flight departed from Singapore, the time in Perth was 8.50 p.m. The flight arrived in Perth 5 h 15 min later. At what time in Perth did the flight arrive? Give your answer in 24-hour clock.

Ans: _____

18. Express $\frac{78}{9}$ as a mixed number in the simplest form.

Ans: _____

19. Find the sum of 11 tens, 1 tenth and 10 hundredths.

Ans: _____

20. Find the average of 180 cm and 1.2 m. Leave your answer in metres.

Ans: _____m

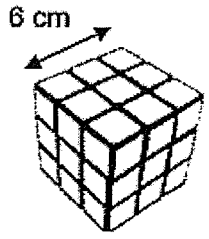
Questions **21** to **30** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (20 marks)

---

21. Pillai mixed milk and rose syrup to make a drink. He used $\frac{7}{8}\ell$ of milk. The amount of rose syrup used was $\frac{1}{6}\ell$ less than the milk used. How much milk and rose syrup did Pillai use altogether? Leave your answer as a mixed number in the simplest form.

Ans: _____ ℓ

22. Alex has a box measuring 40 cm by 50 cm by 60 cm. He wants to pack identical rubik's cubes of edge 6 cm into the box. What is the maximum number of rubik's cubes he can pack into the box?



Ans: _____

23. Mrs Delvi had $24n$ cookies. She distributed all of them equally to 8 of her grandchildren. Then, one of her grandchildren, Heidi, ate 4 cookies. How many cookies had Heidi left? Leave your answer in terms of n.

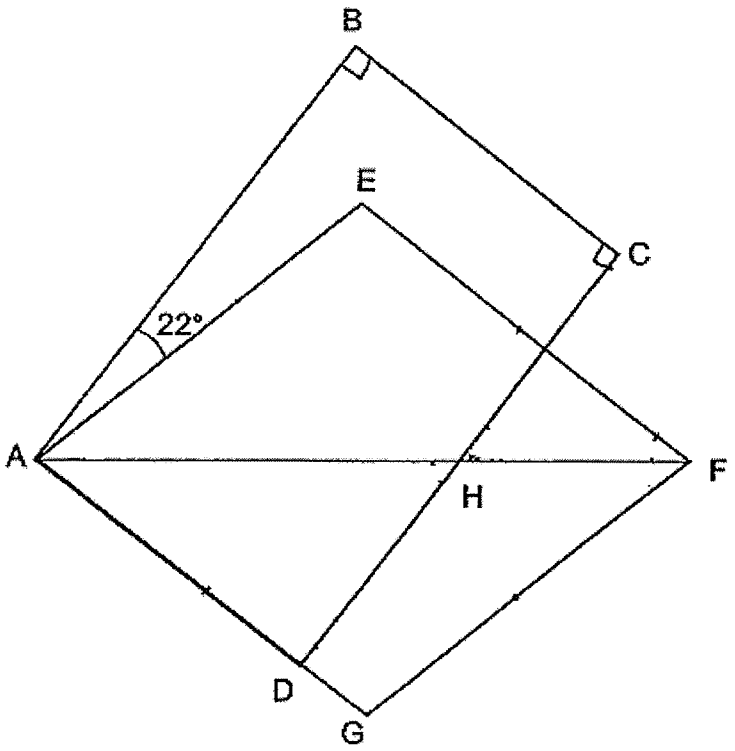
Ans: _____

24. There were equal number of male and female members at a gym. After 265 male members and 545 female members cancelled their gym membership, the number of remaining male members was 9 times that of the remaining female members. How many female members remained at the gym?

Ans: _____

25. In the figure, ABCD is a rectangle and AEFG is a rhombus.

AHF is a straight line and $\angle BAE = 22°$. Find $\angle CHF$.

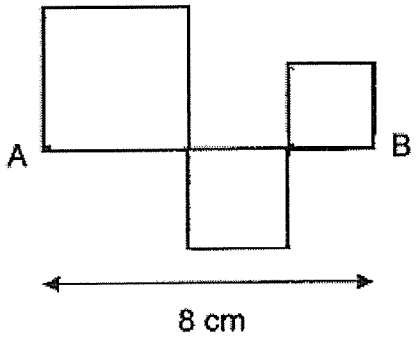


Ans: _____°

26. Anna needed 20 pieces of wires, each of length 0.3 m. The wires were sold in rolls of 2 m each. What was the least number of rolls of wire that Anna needed to buy?

Ans: _____

27. The figure is made up of 3 squares. AB is a straight line. What is the perimeter of the figure?



Ans: _____ cm

28. The table shows the rate for renting a karaoke room at a community club.

First 2 hours	$9 per hour
Every additional 30 min	$8 per 30 min

A group of friends paid a total of $42 for the rental of a karaoke room. How many hours did they rent the karaoke room for?

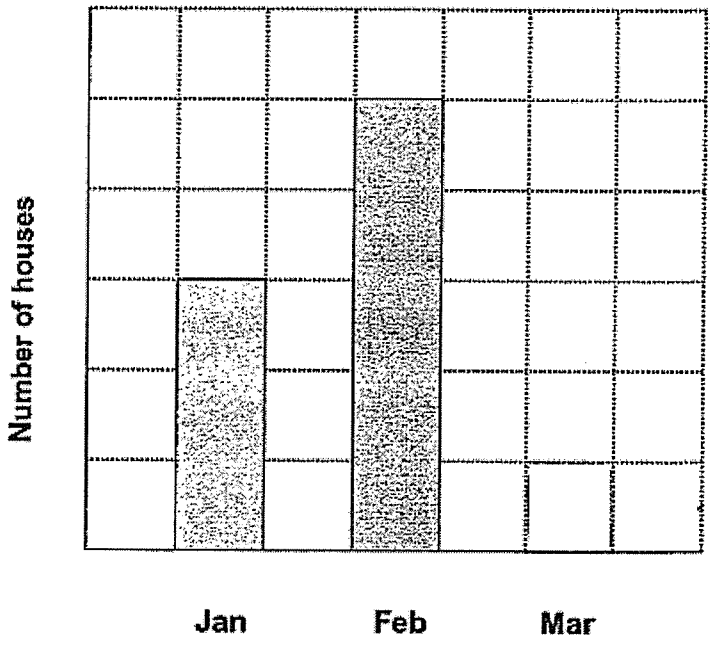
Ans: _____ h

29. Sara had $\frac{5}{6}$ m^2 of fabric. She cut out $\frac{1}{4}$ of it and used the remaining fabric to make 5 identical masks. How much fabric did she use to make 1 mask?

Ans: _____ m^2

30. The graph shows the number of houses sold from January to March.

The bar for the number of houses sold in March has not been drawn.



The total number of houses sold in February and March was $\frac{2}{3}$ of the total number of houses sold over the 3 months.

Complete the graph by shading to show the number of houses sold in March.

End of Paper
Please check your work carefully ☺

RAFFLES GIRLS' PRIMARY SCHOOL
PRELIMINARY EXAMINATION
MATHEMATICS (PAPER 2)
PRIMARY 6

Name: _____( )

Form class: P6 _____ Math Teacher :

Date: 19 Aug 2020 Duration: 1 h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

Questions **1** to **5** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.
All diagrams are not drawn to scale. (10 marks)

---

1. There were 538 females and 306 males at a carnival. 110 females left and 25 males entered the carnival. What was the percentage decrease in the total number of people at the carnival? Round your answer to the nearest 1 decimal place.

Ans : _____ %

2. The table shows the points scored by 3 children in a game.

Participants	Ali	Bala	Charlie
Score	21	?	?

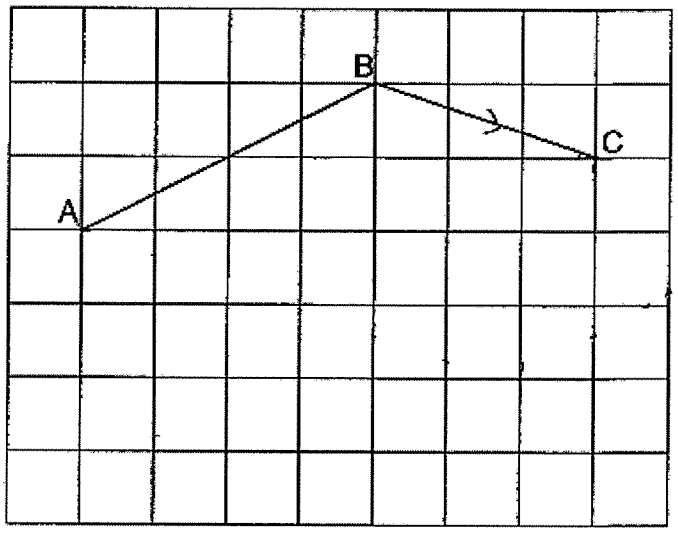
Their total score was 135. All their scores were 2-digit numbers. What was the lowest possible score among the 3 of them?

Ans: _____

3. In the square grid, AB and BC form two sides of a trapezium ABCD.

There are 2 right angles in ABCD.

Complete the drawing of trapezium ABCD.



4. Amos is 12 years younger than his sister. The ratio of Amos' age to his sister's age is 1 : 5. In how many years' time will the ratio of Amos' age to his sister's age be 2 : 5?

Ans : _____ years

5. The table shows the number and the cost of each type of flowers sold at a florist.

Flower	Number of flowers sold	Cost
Rose	135	$2 each
Lily	$2y$	$2.50 each
Carnation	$4y$	4 for $5

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick(✓) to indicate your answer.

Statement	True	False	Not possible to tell
(a) If the total number of flowers sold was 405, 180 carnations were sold.			
(b) The amount of money collected from selling the lilies and the carnations were the same.			
(c) The amount of money collected from selling the roses was the highest among the 3 types of flowers.			

For questions **6** to **17**, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in the brackets [ ] at the end of each question or part-question. All diagrams are not drawn to scale. (45 marks)

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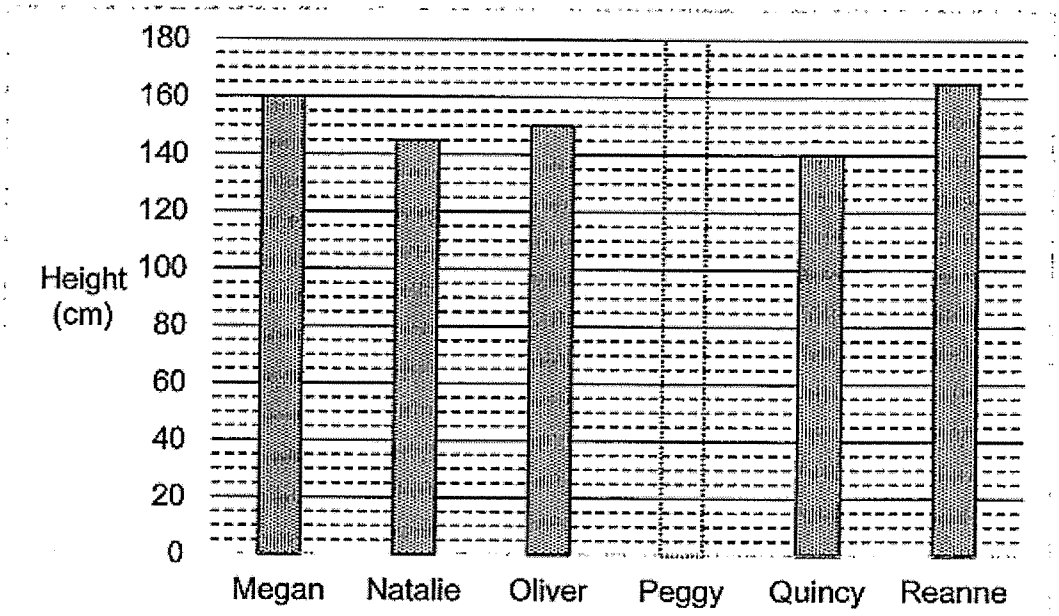
6. The bar chart shows the height of 6 people. The bar that shows Peggy's height has not been drawn.



Peggy's height was 20 cm more than the average height of Quincy and Megan.

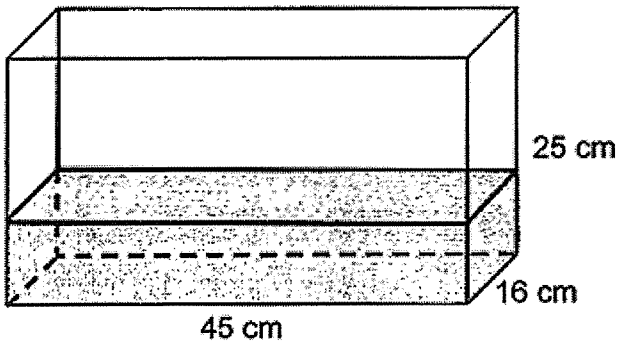
(a) What was the height of Peggy?

(b) Who was/were taller than the average height of all the people?

Ans: (a) _____ [2]

Ans: (b) _____ [2]

7. A rectangular tank measuring 45 cm by 16 cm by 25 cm was $\frac{1}{3}$ filled with water. After water from some identical bottles was poured into the rectangular tank, it became $\frac{7}{8}$ full. The capacity of each bottle was 650 ml. What was the minimum number of bottles used to pour the water into the rectangular tank?



Ans: _____ [3]

8. Mr Choo needs a total of 15 h to prepare 1800 rice dumplings. He prepares the same number of rice dumplings every hour. When his wife helps him for 4 h, 1800 rice dumplings can be prepared in 9 h.

(a) What is the average number of rice dumplings that Mr Choo's wife prepares in the 4 hours?

(b) What is the difference in the time taken between Mr Choo and his wife if she prepares 1800 rice dumplings alone?

Ans: (a) _____ [2]

(b) _____ [2]

9. At its year-end sale, a company sold calendars and diaries at the prices shown.

An equal number of calendars and diaries were sold. The company collected a total of $29 815 from the sale of calendars and diaries. How many calendars and diaries did the company sell in all?

Ans: _____ [3]

10. In a school, 55% of the pupils are girls and the rest are boys. As a school, 40% of the boys wear spectacles and 60% of the pupils wear spectacles.

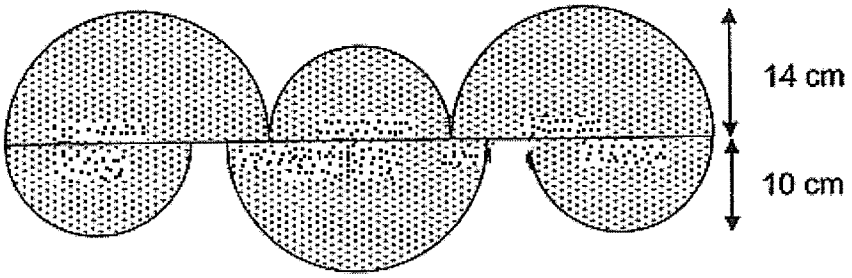
(a) What percentage of the pupils are girls who wear spectacles?

(b) 208 girls do not wear spectacles. How many pupils are there altogether?

Ans: (a) _____ [2]

(b) _____ [1]

11. The figure is formed by 3 identical big semicircles and 3 identical small semicircles.



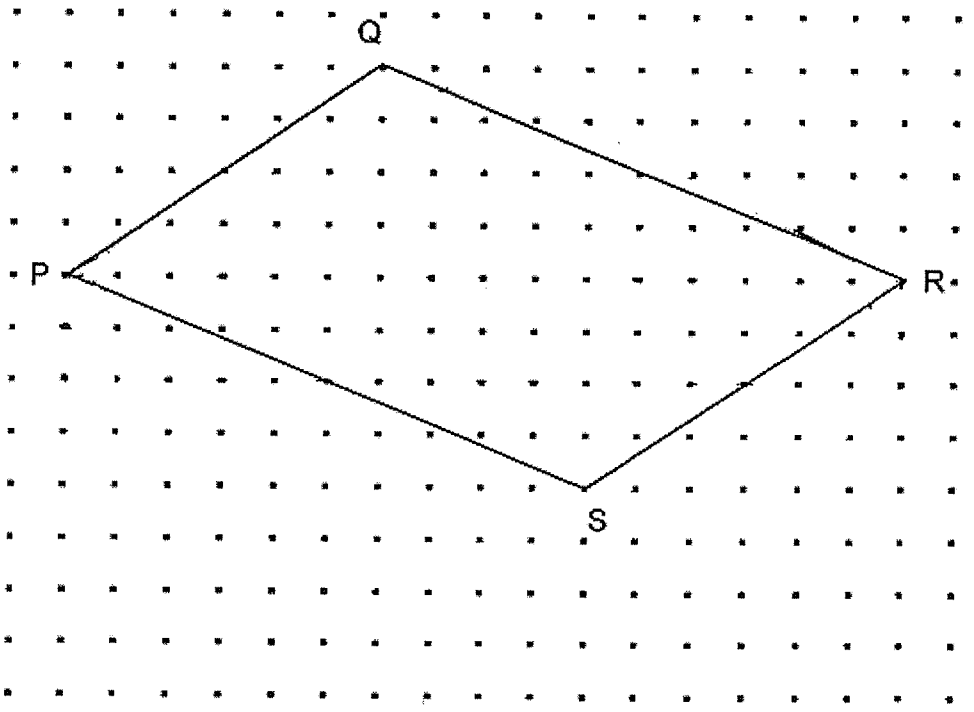
Use the calculator value of π to find the perimeter of the figure.
Round your answer to 2 decimal places.

Ans: _____ [3]

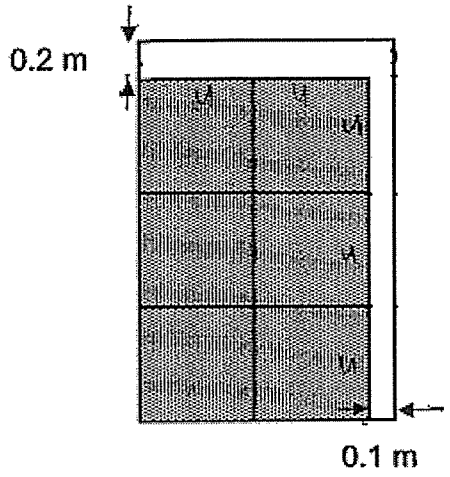
12. The figure shows a parallelogram PQRS drawn on a grid.

(a) PRTU is a rectangle that has half the area of PQRS.
Draw PRTU on the grid. [2]

(b) PRV is an isosceles triangle that has the same area as rectangle PRTU.
Draw PRV on the grid such that it does not overlap with rectangle PRTU.
[1]



13. The figure shows 6 identical squares inside a rectangle. The arrangement results in a gap of 0.2 m at the top and a gap of 0.1 m at the side. The area of the unshaded region is 3000 cm^2.



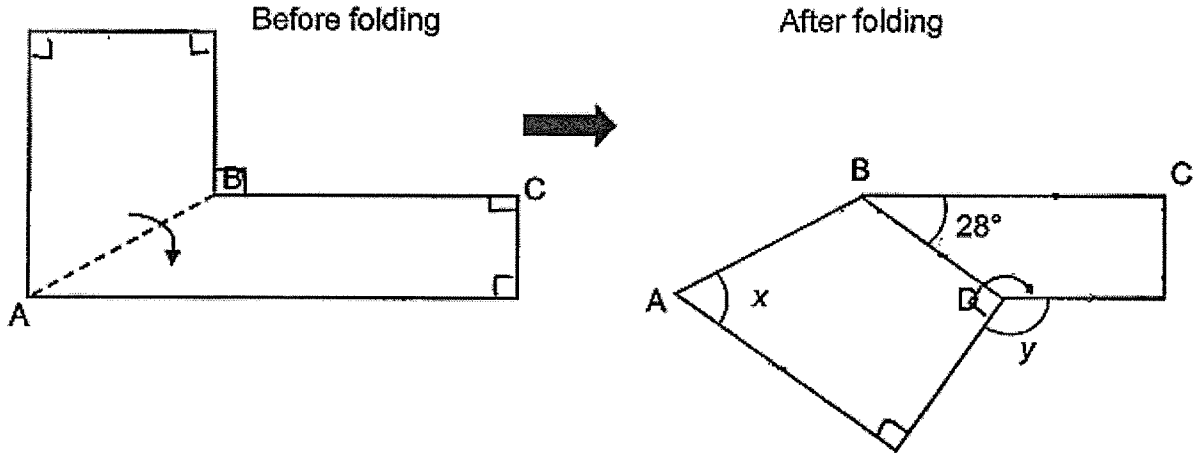
What is the area of the rectangle?

Ans: _____ [4]

14. A L-shaped paper is made up of perpendicular lines. It is folded along line AB as shown. $\angle CBD = 28°$.

(a) Find $\angle x$.

(b) Find $\angle y$.



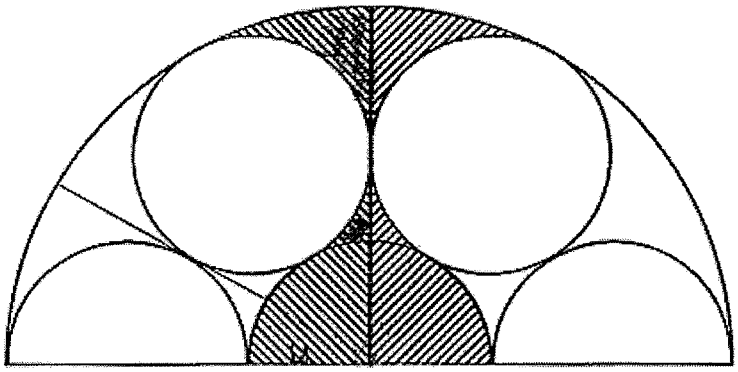
Ans: (a) _____ [2]

(b) _____ [2]

15. The figure is made up of a big semicircle of radius 30 cm. 2 circles and 3 semicircles of equal radius are drawn in the big semicircle.

(a) What is the radius of the circle?

(b) What is the area of the shaded parts? Take $\pi = 3.14$
Round your answer correct to 1 decimal place.



Ans: (a) _____ [1]

(b) _____ [3]

16. Mdm Nurul had some red and green apples in her minimart. The ratio of the number of red apples to the number of green apples was 13 : 7. After selling 60% of the red apples and 55 green apples, the ratio of the number of red apples to the number of green apples was 13 : 12.

(a) How many apples were there altogether at first?

(b) After that, she bought more red apples. The number of red apples she bought was $\frac{3}{10}$ of the number of red apples left before that. How many red apples did she have in the end?

Ans: (a) _____ [3]

(b) _____ [2]

17. Peter, Roger and Mary each had a sum of money. They decided to split their dinner bill equally.

If Roger were to pay for the bill first, the sum of his remaining money would be $\frac{4}{9}$ of Mary's money.

If Mary were to pay for the bill first, the sum of her remaining money would be $\frac{11}{15}$ of Roger's money.

If Peter were to pay for the bill first, he would have used up all his money.

(a) Given that Mary had $126 more than Roger, how much was each person's share of the bill?

(b) Express Peter's sum of money as a fraction of their total sum of money

Ans: (a) _____ [4]

(b) _____ [1]

End of Paper
Please check your work carefully ☺

SCHOOL : RAFFLES GRILS' PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	3	2	2	3	1	1	2	4	4

Q 11	Q12	Q13	Q14	Q15
1	2	3	3	2

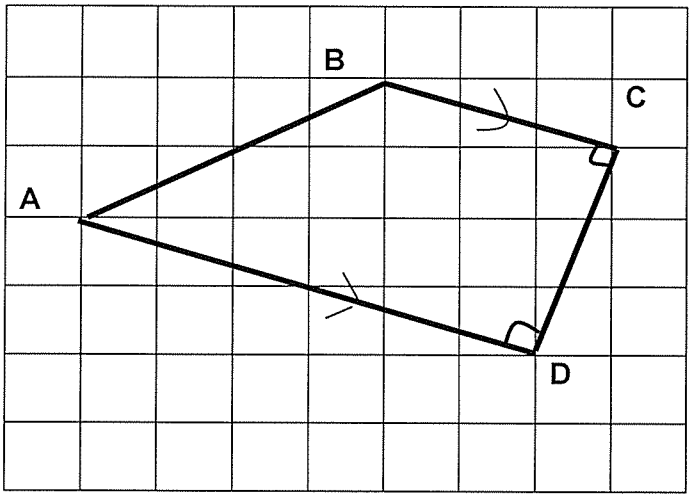
PAPER 1 BOOKLET B

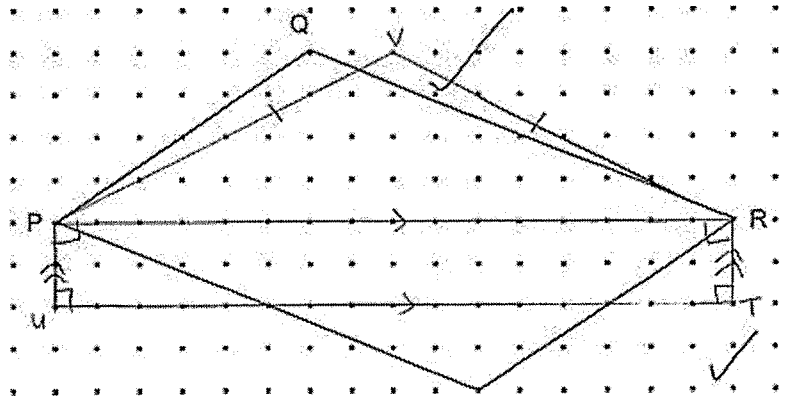
Q16)	50 – 36 + 4 = 18
Q17)	02 05
Q18)	$8\frac{2}{3}$
Q19)	11 x 10 = 110 10 x 0.01 = 0.1 110 + 0.1 + 0.1 = 110.2
Q20)	1.2m x 100 = 120cm (180 + 120) ÷ 2 = 150 150cm = 1.5m
Q21)	M → $\frac{7}{8}$ ($\frac{21}{24}$) R → $\frac{7}{8}$ - $\frac{1}{6}$ = $\frac{21}{24}$ - $\frac{4}{24}$ = $\frac{17}{24}$ Total → $\frac{21}{24}$ + $\frac{17}{24}$ = $\frac{38}{24}$ = 1 $\frac{14}{24}$ = 1$\frac{7}{12}$ ℓ
Q22)	40 ÷ 6 = (6) R4 50 ÷ 6 = (8) R2 60 ÷ 6 = (10) 6 x 8 x 10 = 480

Q23)	24u ÷8 = 3u (3u – 4)cookies
Q24)	545 – 265 = 280 8u→280 u→280 ÷8 = 35
Q25)	(90 – 22) ÷2 = 34 180 – 90 – 34 = 56°
Q26)	0.3 x 100 = 30 2 x 100 = 200 200 ÷ 3 = (6) R20 20 ÷6 = (3) R2 3 + 1 = 4
Q27)	4 x 8 = 32cm
Q28)	1st + 2nd hr →$9 x 2 = $18 $42 – $18 = $24 $24 ÷$8 = 3 3 x 30 min = 90 min = 1h 30 min 1h 30min + 1h + 1h = 3h 30min = 3.5h
Q29)	Left→$\frac{5}{6}$ x ¾ = $\frac{5}{8}$ 1 mask → $\frac{5}{8}$ ÷5 = $\frac{5}{8}$ x $\frac{1}{5}$ = $\frac{1}{8}$ m2
Q30)	Mar = 1u 

PAPER 2

Q1)	538 – 110 = 428 306 + 25 = 331 Before →538 + 306 = 844 After →428 + 331 = 759 844 – 759 =85 $\frac{85}{844}$ x 100% = 10.1%

Q2)	135 – 21 = 114 114 – 99 = 15
Q3)	
Q4)	15 – 3 = 12 12u→12 8 – 3 = 5 5u →12 ÷12 x 5 = 5 years
Q5)	a)True b)True c)Not
Q6)	a)(140 + 160) ÷ 2 = 150 150 + 20 = 170 cm b)(160 + 145 + 150 + 170 + 140 + 165) ÷ 6 = 155 Megan , Peggy and Reanne
Q7)	$\frac{1}{3}$ full →(4 x 16 x 25) ÷ 3 = 6000 $\frac{7}{8}$ full →(45 x 16 x 25) ÷ 8 x 7 = 15750 15750 – 6000 = 9750 9750 ÷650 = 15
Q8)	Mr →1800 ÷ 15 = 120 <u>9hrs</u> Mr →120 x 9 = 1080 1800 – 1080 = 720 a)720 ÷ 4 = 180 b)1800 ÷180 = 10 15 – 10 = 5h

Q9)	C→24 ÷6 x 37 = 148 D→24 ÷ 8 x 99 = 297 29815 ÷(148 + 297) = 67 67 x (24 24) = 3216
Q10)	a)60 – 18 = 42% b)13u→208 100u→208 ÷13 x 100 = 1600
Q11)	<u>Diameter of</u> Large semi →14 x 2 = 28 Small semi → 10 x 2 = 20 Perimeter 0f →$\frac{3}{2}$ x π x 28 = 42π →$\frac{3}{2}$ x π x 20 = 30π → 4 + 4 = 8 Total →42π + 30π + 8 ≈ 234.19cm 28 + 20 + 28 = 76 20 + 28 + 20 = 68 (76 – 68) ÷2 = 4
Q12)	
Q13)	a→ (2x) x 20 + (10 x 20) = 40 x 200 b →(3x) x 10 = 30x 70x + 200 = 3000 X→(3000 – 200) ÷70 = 40 3x→40 x 3 = 120 2x →40 x 2 = 80 (120 + 20) x (80 + 10) = 12600cm2

Q14)	a)360 – 90 = 152 (270 – 28) ÷2 = 121 180 – 121 = 59° b)180 – 28 – 152 360 – 152 – 90 = 118°
Q15)	a)3u→30cm 2u→30 ÷ 3 x 2 =20cm 20 ÷2 = 10 b)<u>Area of..</u> Big qued→ ¼ x 3.14 x 30 x 30 = 706.5 1¾ small circle →549.5 3▭→706.5 – 549.5 = 157 1▭ → 157 ÷ 3 = $52\frac{1}{3}$ Small quad→ ¼ x 3.14 x 10 x 10 = 78.5 Total shaded→($52\frac{1}{3}$ + 78.5) x 2 ≈ 261.7
Q16)	5.5u→55 32.5 + 17.5 = 50 a)50u→55 ÷5.5 x 50 = 500 b)13u→55 ÷5.5 x 13 =130 130 ÷ 10 x 13 = 169
Q17)	a)4u + x = 15p 9u – x = 11p 36u + 9x = 135p 36u – 4x = 44p 13x →91p X →7p 15p – 7p = 8p 4u = 8p 9u = 18p 18p – 15p = 3p 3p→126 7p →126÷3 x 7 = 294 294 ÷3 = 98 b)$\frac{7}{40}$

RED SWASTIKA SCHOOL

2020 PRELIMINARY ASSESSMENT

MATHEMATICS
PAPER 1

Name : _____ ( )

Class : Primary 6 / _____

Date : 20 Aug 2020

BOOKLET A

15 Questions
20 Marks
Duration of Paper 1 (Booklets A & B): 1 hour

Note:

1. Do not open this Booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the Booklet.
3. Do not waste time. If a question is difficult for you, go on to the next one.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this booklet, you should have the following:
   (a) Page 1 to Page 5
   (b) Questions 1 to 15
6. You are not allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

---

1 Which of the following is eight hundred and two thousand and seven in figres ?

(1) 80 207
(2) 802 007
(3) 820 007
(4) 8 002 007

2 Express **5004g** as kg and g.

(1) 5 kg 4 g
(2) 5 kg 40 g
(3) 50 kg 4 g
(4) 50 kg 40 g

3 Which of the following is the **smallest ?**

(1) 8.27
(2) 8.72
(3) 8.207
(4) 8.702

4 Which of the following is equivalent to $\frac{15}{20}$?

(1) $\frac{9}{16}$

(2) $\frac{10}{15}$

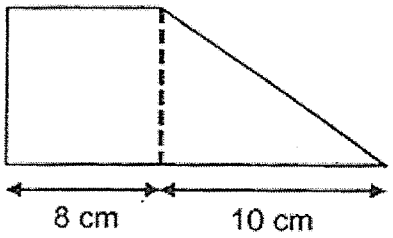
(3) $\frac{9}{15}$

(4) $\frac{9}{12}$

5 The radius of a circle is 10 cm . Find the circumference of the circle. Take $\pi = 3.14$

(1) 31.4 cm
(2) 62.8 cm
(3) 78.5 cm
(4) 314 cm

6 The figure is made up of a square and a right-angled triangle. Find the area of the figure.



(1) 72 cm^2
(2) 104 cm^2
(3) 114 cm^2
(4) 144 cm^2

7 Which letter below is **not** symmetrical?

T O W N

(1) T
(2) O
(3) W
(4) N

8 What is the value of $2m + \frac{m-1}{10}$ when m = 3?

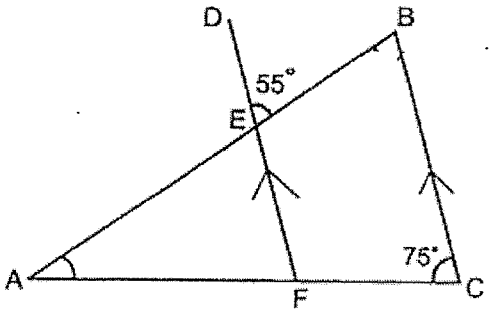
(1) 5.6
(2) 5.8
(3) 6.2
(4) 6.4

9 The average of two numbers is 38. When a third number is added, the average of the three numbers is 40. Find the third number.

(1) 39
(2) 42
(3) 44
(4) 82

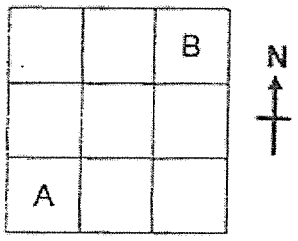
10 In the figure below, ABC is a triangle. $\angle DEB = 55^\circ$ and $\angle FCB = 75^\circ$.

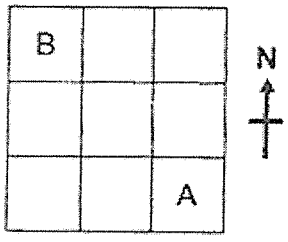
BC is parallel to DF. Find $\angle EAF$.

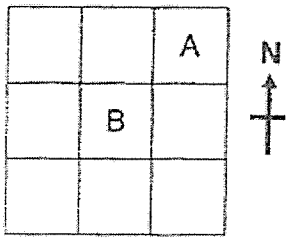


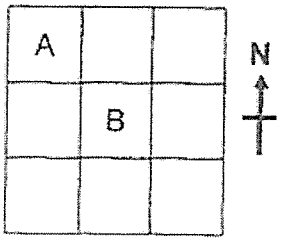
(1) 20°
(2) 50°
(3) 55°
(4) 75°

11 Points A and B are drawn on square grid below.
Which of the following shows A is south-west of B correctly?

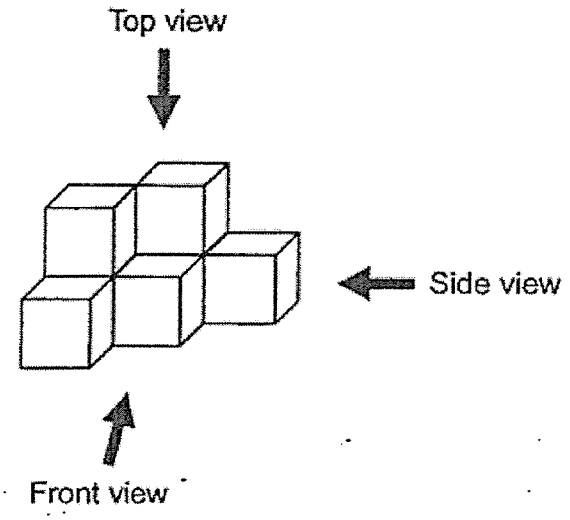
(1)


(2)


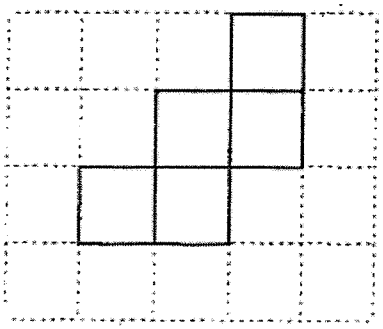
(3)


(4)


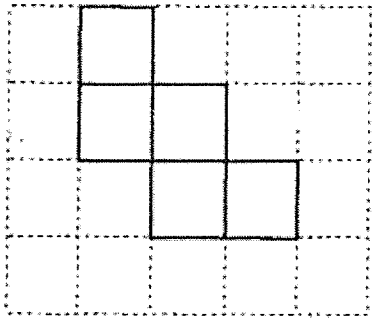
12 The solid below is made of 7 cubes.
Which of the following shows the top view of the solid correctly ?



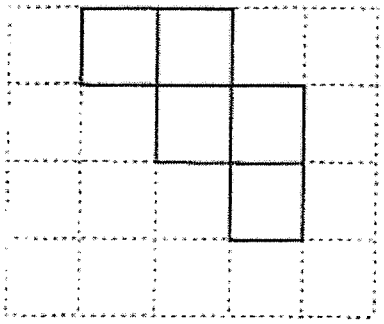
(1)



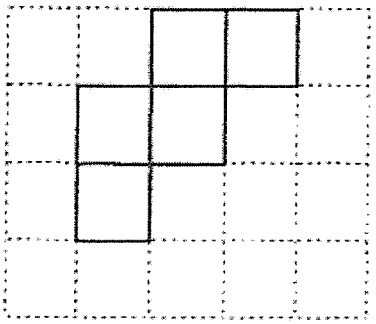
(2)



(3)



(4)



13 At a supermarket, 5 apples are sold at $3.55. What is the price of 30 apples ?

(1) $17.75
(2) $21.30
(3) $106.50
(4) $124.25

14 A group of students was asked to vote for their favourite fruit from a list of 4 fruits. The table shows the number of students who voted for each fruit. How many type(s) of fruit(s) was/were voted as a favourite by more than 25% of the students?

Types of fruit	Apple	Banana	Orange	Pear
Number of students	30	18	10	22

(1) 1
(2) 2
(3) 3
(4) 4

15 A number is the sum of all the factors of 14. Which of the following can be added to the number to change it to a multiple of 9?

(1) 5
(2) 8
(3) 3
(4) 4

RED SWASTIKA SCHOOL

2020 PRELIMINARY ASSESSMENT

MATHEMATICS
PAPER 1

Name : _____ ( )

Class : Primary 6 / _____

Date : 20 Aug 2020

BOOKLET B

15 Questions
25 Marks

In this booklet, you should have the following:
(a) Page 6 to Page 12
(b) Questions 16 to 30

MARKS

	OBTAINED	POSSIBLE
BOOKLET A		20
BOOKLET B		25
TOTAL		45

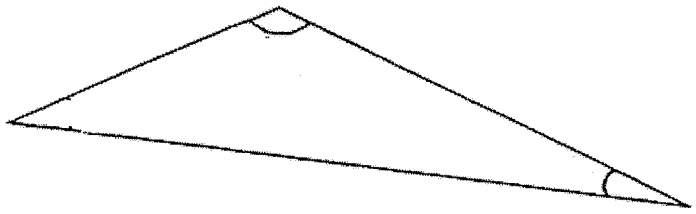
Parent's Signature : _____

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

16 Find the value of 58 x 60.

Ans: _____

17 Use a protractor to measure the obtuse angle in the triangle below and write the answer in the answer space provided.



Ans: _____ °

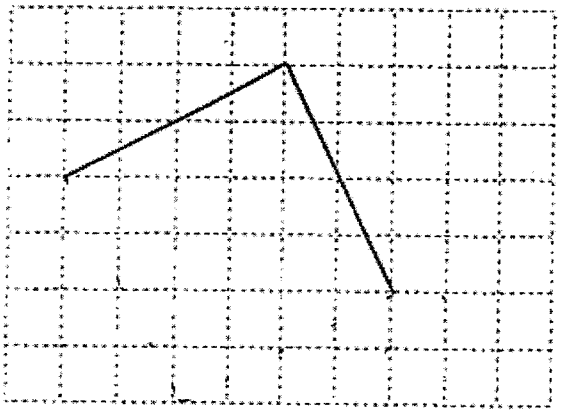
18 The table below shows the number of dollar notes that Kim has saved. Find the total amount of money Kim has saved.

Type of dollar notes	$2	$5	$10
Number of dollar notes	4	5	1

Ans: $_____

3

19 On the grid below, draw two straight lines to complete a symmetrical figure.



20 A machine takes 5 minutes to make 3 boxes. With two such machines working at the same given rate, how mant minutes would be needed to make 90 such boxes ?

Ans: _____ min

2

Questions 21 to 30 carry 2 marks each. Show your workings clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(20 marks)

---

21 Find the value of

(a) $8 \times 4 \div 2 - 1$

(b) $20 - (3 + 4 \times 2)$

Ans: (a) _____

(b) _____

---

22 Find the value of $\frac{7}{4} + 2\frac{5}{6}$ as a mixed number in its simplest form.

Ans: _____

4

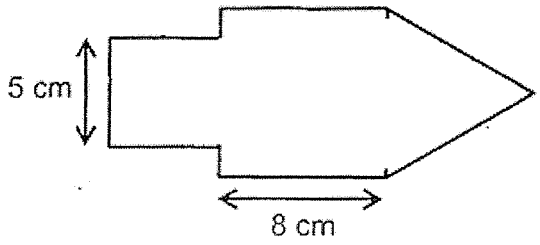
4

23 Water from a tap fills an empty tank at 600 *mℓ* per minute. At this rate, how much water is in the tank after 25 minutes? Express your answer in litres.

Ans: _____ *ℓ*

---

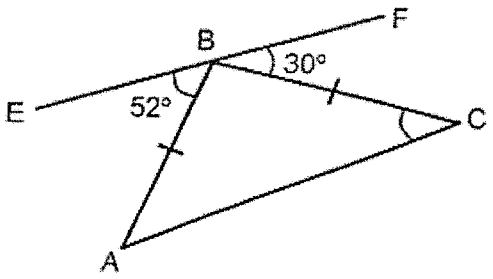
24 The figure is made up of 2 squares and 1 equilateral triangle. Find the perimeter of the figure.



Ans: _____ cm

4

25 In the figure below, ABC is an isosceles triangle, EBF is a straight line, $\angle ABE = 52°$ and $\angle CBF = 30°$. Find $\angle BCA$.



Ans: _____

---

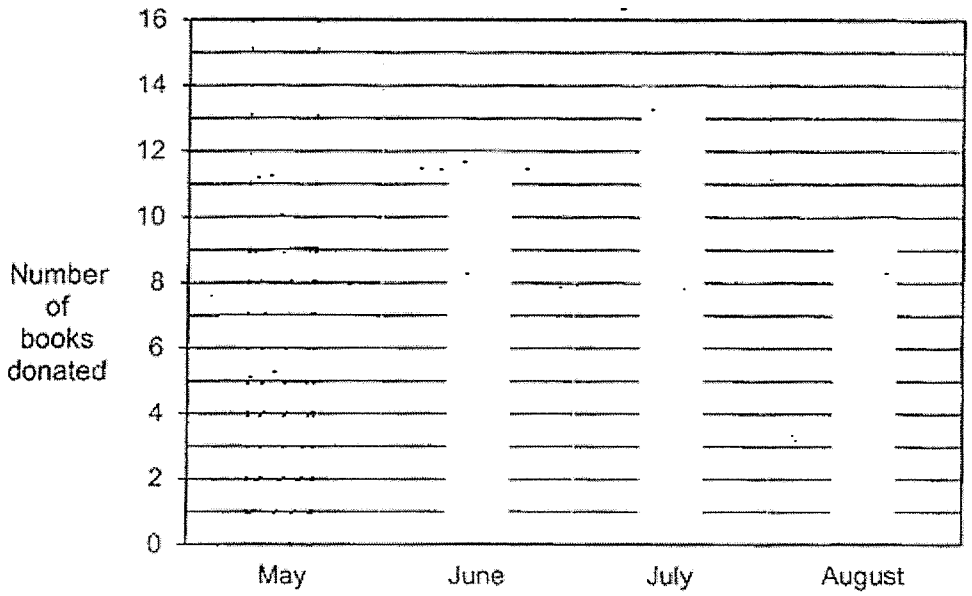
26 The average of 2 numbers is 39. The average of another 3 numbers is 44. Find the total of these 5 numbers.

Ans: _____

4

Use the information below to answer Questions 27 and 28.

The bar graph below shows the number of books donated by a class from May to August. The number of books donated in May was $\frac{1}{5}$ of the total number of books donated during the 4 months.



27 Draw the bar for May in the graph.

28 What fraction of the total number of books was donated in June?

Ans: _____

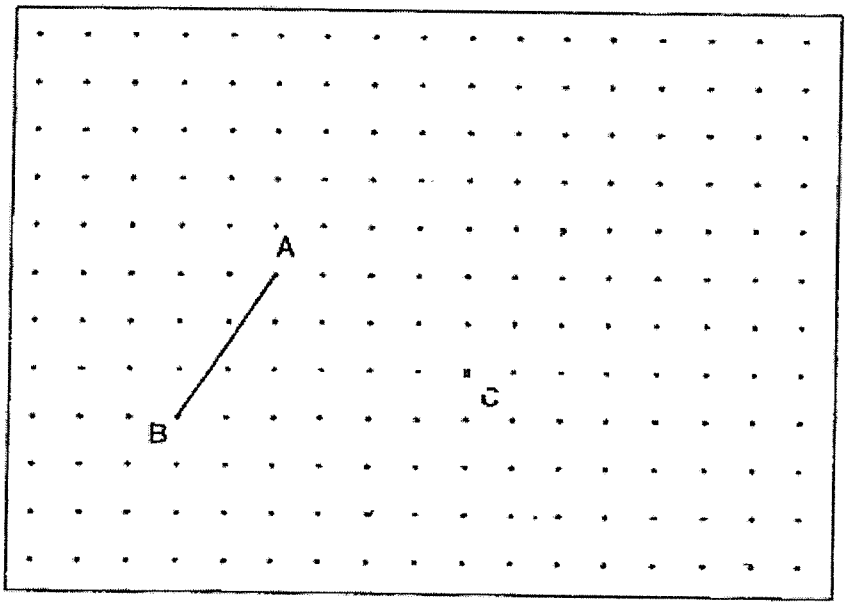
4

29 In a sale, each cup is sold at $3a and each plate is sold at $(a + 4). Find the total price of 3 cups and 2 plates in terms of a. Express your answer in the simplest form.

Ans: $_____

---

30 Using the grid and the given line AB, draw another straight line with the following characteristics:
- parallel to AB
- twice the length of AB
- passes through C which is marked by X on the grid as shown



END OF PAPER

4

RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

2020 PRELIMINARY ASSESSMENT

MATHEMATICS
PAPER 2

Name : _____ ( )

Class : Primary 6 / _____

Date : 20 Aug 2020

17 Questions
55 Marks
Duration of Paper 2: 1 hour 30 minutes

Note:
1. Do not open this Booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the Booklet.
3. Do not waste time. If a question is difficult for you, go on to the next one.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this paper, you should have the following:
   (a) Page 1 to Page 13
   (b) Questions 1 to 17
6. You are allowed to use a calculator.

MARKS

	OBTAINED	POSSIBLE
PAPER 1		45
PAPER 2		55
TOTAL		100

Questions 1 to 5 carry 2 marks each. Show your workings clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

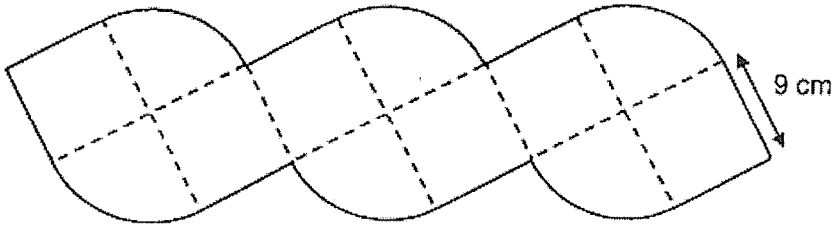
---

1 The total of 2 numbers is 43.2 and their difference is 12.8. Find the smaller number.

Ans: _____

---

2 The figure is made up similar quadrants and squares. Find the perimeter of the figure correct to 1 decimal place. Take $\pi = 3.14$.



Ans: _____ cm

---

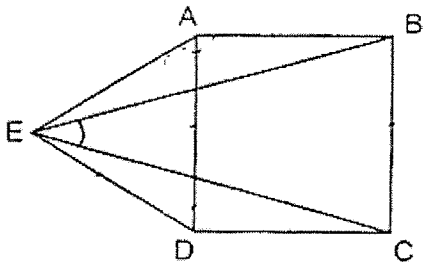
3 Study the algebraic expressions that follow a pattern below.
Find the value of w if Number 6 is 65.

Number 1	Number 2	Number 3	....	Number 6
13w + 12	11w + 10	9w + 8	....	?

Ans: _____

---

4. In the figure below, ABCD is a square and ADE is an equilateral triangle.
Find ∠BEC.



Ans: _____ °

4

5 Devi had to fill as many jugs as possible with 10 ℓ of water. The capacity of each jug is $\frac{9}{16}$ ℓ.

(a) What was the most number of jugs that could be completely filled with water?

(b) How much of the water was left over? Give your answer in litres.

Ans: (a) _____

(b) _____ ℓ

2

For Questions 6 to 17, show your workings clearly in the space below each question and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

(45 marks)

---

6 At a shop, Alice paid \$15.60 for a chocolate cake and 5 curry puffs. Ben paid \$26.45 for a chocolate cake and 12 curry puffs. Find the cost of 1 chocolate cake.

Ans: _____ [3]

---

7 Use all the digits 6, 2, 3 to form the number for each box below.

(a) ? minutes are smaller than 4 hours.

(b) ? minutes are closest to 5 hours.

Ans: (a) _____ [1]

(b) _____ [2]

6

8 A baker had a total of 425 tarts and cupcakes. After selling an equal number of both types, he had $\frac{1}{3}$ of the tarts and $\frac{1}{4}$ of the cupcakes left. What was the total number of tarts and cupcakes left?

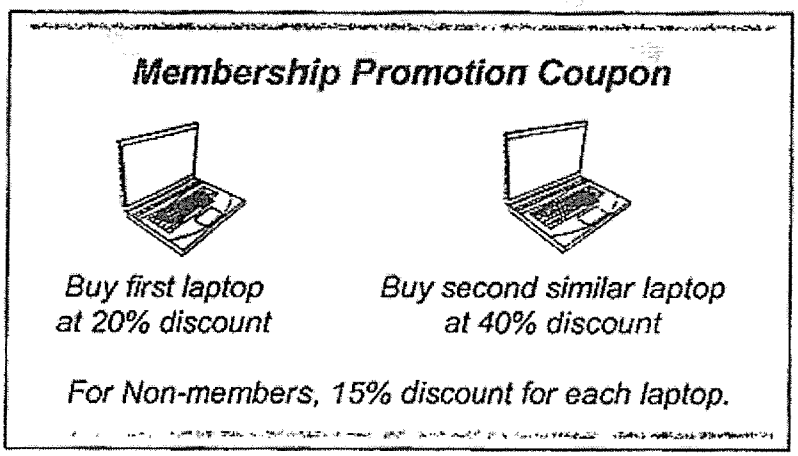
Ans: _____ [3]

---

9 Tim had some books for sale. He sold some books on Saturday. On Sunday, he sold $\frac{1}{4}$ of the remainder. After the sale, the ratio of number of books sold to the number of books left was 8 : 5. What was ratio of the number of books sold on Saturday to the number of books sold on Sunday?

Ans: _____ [3]

10

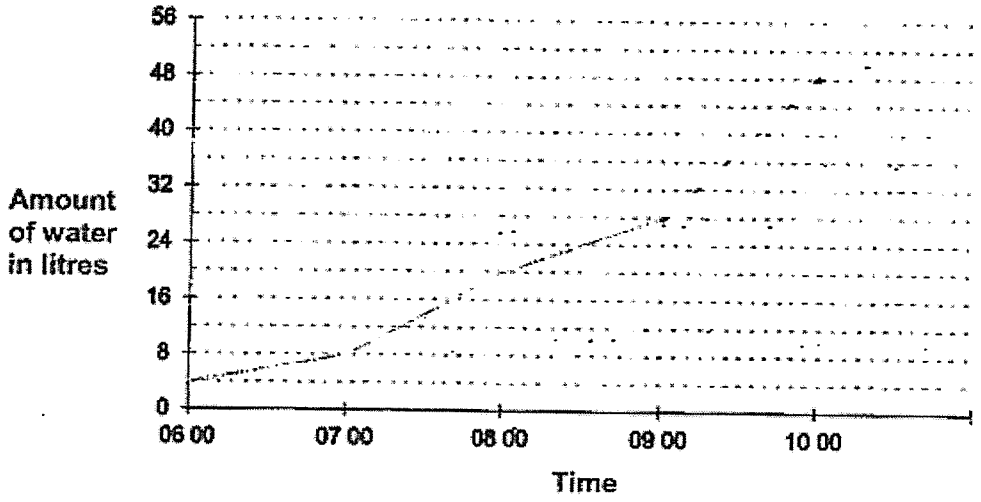


Using the membership promotion coupon, Sue paid $2940 for 2 similar laptops. How much would she have paid for 1 such laptop if she was not a member?

Ans: _____ [3]

3

11 A tank was partially filled with water at first. A tap was turned on from 06 00, and the tank was completely filled to 48 litres at 10 00. A line graph, showing the volume of water in the tank at regular intervals of time was drawn up as shown below. However, the line graph only shows the readings from 06 00 to 09 00.



(a) Complete the line graph from the 09 00 to 10 00 with a straight line. [1]

(b) What fraction of the tank was filled with water at first? Express your answer as a fraction in its simplest form.

(c) What was the percentage increase in the amount of water in the tank from 08 00 to 09 00?

Ans: (b)_____ [2]

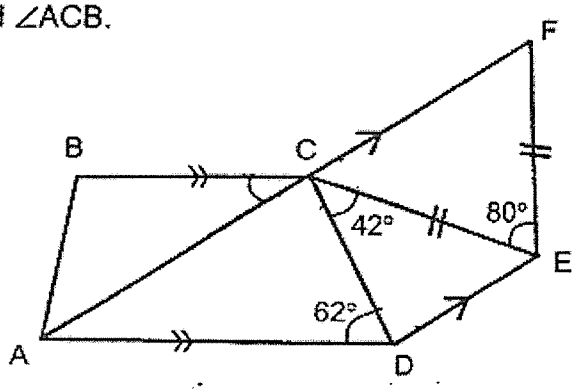
(c)_____ [2]

5

12 In the figure below, ABCD and AFED are trapeziums, CE = EF, $\angle ADC = 62°$, $\angle DCE = 42°$ and $\angle CEF = 80°$.

(a) Find $\angle ACD$.

(b) Find $\angle ACB$.



Ans: (a)_____ [2]

(b)_____ [2]

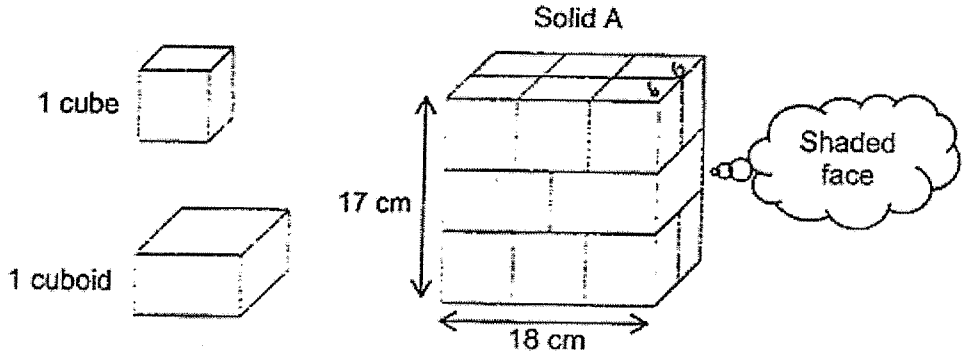
(c) Peter claims that CD is perpendicular to DE.
Do you agree with Peter? Tick Yes or No.
Name the angle that can be used to check for the answer. [1]

☐ Yes. ☐ No.

Check ∠ _____

5

13 Solid A is glued together using 2 similar cuboids and 12 identical cubes as shown.



(a) Find the total area of the shaded face as shown.

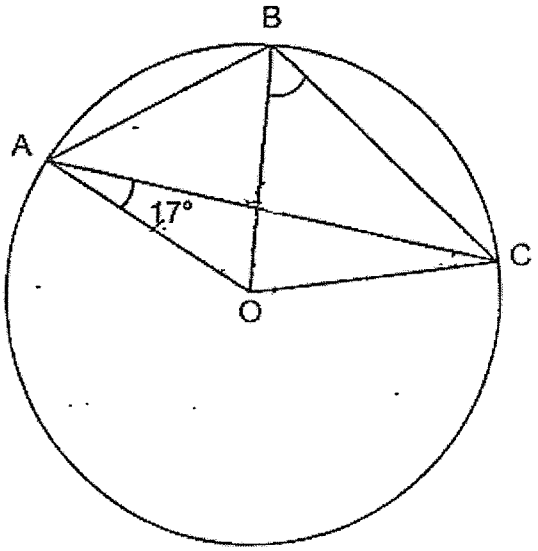
(b) Find the volume of 1 cuboid.

Ans: (a) _____ [2]

(b) _____ [2]

4

14 In the figure below, O is the centre of the circle. OAC, OAB and OBC are triangles. AB = AO and ∠OAC = 17°.



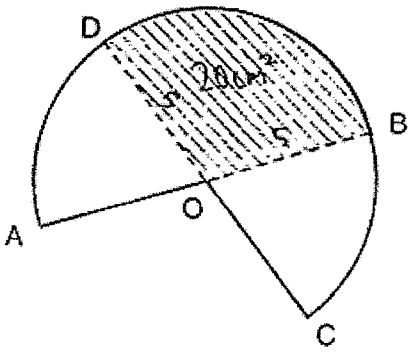
(a) Name an equilateral triangle in the given figure.
(b) Find ∠OBC.

Ans: (a) _____ [1]

(b) _____ [2]

3

15 The figure is formed by 2 identical semicircles overlapping each other. The radius of each semicircle is 5 cm. O is the centre of both semicircles. AOB and COD are the diameters. The area of the shaded part OBD is 20 cm^2 and the perimeter of the shaded part OBD is 18 cm.



(a) Using the calculator value of π, find the area of the figure. Correct your answer to 2 decimal places.

(b) Using $\pi = \frac{22}{7}$, find the perimeter of the figure. Give your answer as a mixed number in the simplest form.

Ans: (a) _____ [2]

(b) _____ [2]

4

16 At first, Ben had some red, blue and green marbles. During a game, he removed 54 red marbles, gave away 40% of the blue marbles and increased the green marbles by 25%. After the game, the ratio of the number of red marbles to the number of blue marbles to the number of green marbles was 3 : 1 : 5. The total number of marbles he had before and after the game was the same.

(a) What fraction of the marbles were red at first?

(b) How many green marbles had he increased during the game?

Ans: (a)_____ [2]

(b)_____ [2]

4

17 Farid used circles to form figures that follow a pattern. The first 4 figures are shown below.

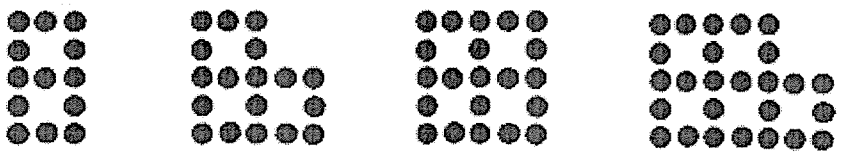


Figure 1 Figure 2 Figure 3 Figure 4

(a) The table below shows the number of circles used for each figure. Complete the table for Figure 5 and Figure 6.

Figure Number	Number of circles used
1	13
2	18
3	21
4	26
5	
6	

[1]

(b) What is the difference in the number of circles Farid would use for Figure 10 and Figure 12?

(c) How many circles would he use for Figure 41?

Ans: (b) _____ [2]

(c) _____ [2]

END OF PAPER

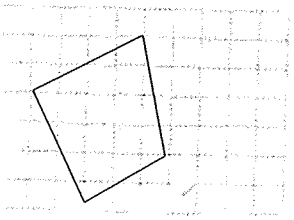
SCHOOL : RED SWASTIKA PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

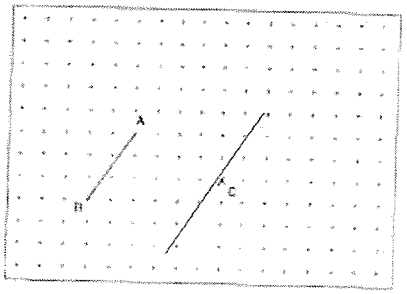
PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	1	3	4	2	2	4	3	3	2

Q 11	Q12	Q13	Q14	Q15
1	4	2	2	3

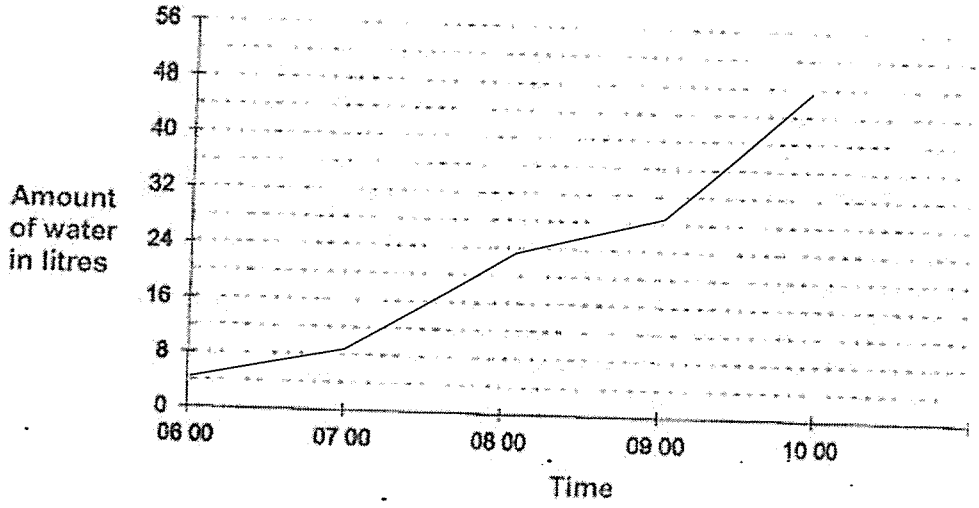
PAPER 1 BOOKLET B

Q16)	58 x 6 x 10 = 580 x 6 = 3480
Q17)	131°
Q18)	Value $2 →2 x 4 = $8 Value $4 → 5 x 5 = $25 10 + 25 + 8 = 35 + 8 = $43
Q19)	
Q20)	5min→3 x 2 = 6 Sets of 5min →90 ÷ 6 = 15 Total →15 x 5 = 75 min

Q21)	a)8 x 4 ÷2 – 1 = 16 – 1 = 15 b)20 – (3+4x2) = 20 – 1 (3+8) = 20 – 11 = 9
Q22)	$4\frac{7}{12}$
Q23)	600 x 25 = 15000 15000ml = 15ℓ
Q24)	Perimeter→8 + 8 + 8 + 8 + 5 + 5 + 5 +3 = (5x8)+5+5 = 40 + 10 = 50cm
Q25)	180 – 52 – 30 = 98 180 – 98 = 82 82 ÷ 2 = 41°
Q26)	39 x 2 = 78 44 x 3 = 132 Total→132 + 78 = 210
Q27)	12 + 14 + 10 = 36 36 ÷ 4 = 19
Q28)	$\frac{4}{5}$ →12 + 14 + 10 = 36 $\frac{5}{5}$ →$\frac{36}{4}$ x 5 = 45 $\frac{12}{45} = \frac{4}{15}$
Q29)	3 cups→3a x 3 =9a 2 plates→(a+4)x2 = 2a+8 Total→9a + 2a + 8 = $(11a + 8)
Q30)	

PAPER 2

Q1)	Small number x 2→43.2 – 12.8 = 30.4 Small number →30.4 ÷ 2 = 15.2
Q2)	156.8 cm
Q3)	3w + 2 = 65 3w →65 – 2 = 63 1w →63 ÷ 3 = 21
Q4)	AEB →(180 – 90 – 60) ÷ 2 = 15 BEC→60 – 15 – 15 = 30°
Q5)	a)17 b)$\frac{7}{16}$
Q6)	Curry puffs →26.45 – 15.60 = 10.85 →10.85÷ 7 = 1.55 5 curry puff →1.55 x 5 = 7.75 Choc→15.6 – 7.75 = $7.85
Q7)	a)236 b)326
Q8)	125
Q9)	Sold (both days) →(¾ R ÷ 5) x 8 = $\frac{24}{20}$ R Sold sat →$\frac{24}{20}$R – ¼ R = $\frac{19}{20}$ R ¼ R = $\frac{5}{20}$ R ANS: 19 : 5
Q10)	100% →4200 ÷ 2 = 2100 100 – 15 = 85 85 % →$\frac{2100}{100}$ x 85 = $1785

Q11)	 b)$\frac{4}{48} = \frac{1}{12}$ c)Diff →28 – 20 = 8 % →$\frac{8}{20}$ x 100% = 40$
Q12)	a)FCE →(180 – 80) ÷ 2 = 50 ACD →180 – 50 – 42 = 88° b)CAD →180 – 88 – 62 = 30 ACB →30° c)NO ACD
Q13)	a)18 ÷ 3 = 26 width→6 x2 = 12 shaded→12 x 17 = 204cm2 b)Height cuboid→17 – 6 – 6 = 5 Length cuboid →18 ÷2 = 9 Vol cuboid→9 x 5 x 12 = 540 cm2
Q14)	a)Triangle OAB b)AFO →180 – 17 – 60 = 103 BFC→103 AOC→180 – 17 – 17 = 146 FOC→146 – 60 = 86 OBC→(180 – 86) ÷ 2 = 47°

Q15)	a)58.54cm2 b)BD→18 – 5 – 5 = 8 2 x ½ x $\frac{22}{7}$ x 10 = $33\frac{3}{7}$ cm
Q16)	a)$\frac{10}{27}$ b)162
Q17)	a)26 + 3 = 29 29 + 5 = 34 b)3 + 5 = 8 c)41÷2 = 20 R 0.5 (20 x5) + (20 x3) + 13 = 173

KYS / AS / TMY / SL / CT

Index No. | | | | | | — | |

SINGAPORE CHINESE GIRLS' SCHOOL

PRELIMINARY EXAMINATION 2020

PRIMARY 6

MATHEMATICS
PAPER 1

BOOKLET A

Name : _____ **(** **)**

Class : Primary 6 SY / C / G / SE / P **18 August 2020**

		Marks attained	Max Mark
Paper 1	Booklet A		20
	Booklet B		25
Paper 2			55
Total Marks			100

Parent's Signature

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15 Questions
20 Marks

Total Time for Booklets A and B: 1 h

INSTRUCTIONS TO CANDIDATES
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
You are not allowed to use a calculator.

Booklet A

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet.

(20 marks)

---

1. What does the value of the digit 2 in 5.629 stand for?

   (1) 2 ones
   (2) 2 tenths
   (3) 2 hundredths
   (4) 2 thousandths

2. 3817 cm = _____ m

   (1) 0.3817 m
   (2) 3.817 m
   (3) 38.17 m
   (4) 381.7 m

3. Which one of the following would be the most likely mass of a watermelon?

   (1) 5 g
   (2) 5 kg
   (3) 50 g
   (4) 50 kg

4. What is the value of $5k - \frac{3k}{2}$ when $k = 6$?

   (1) 30
   (2) 21
   (3) 12
   (4) 9

5. Which of the following is the same as $6 \div \frac{9}{15}$?

(1) $6 \times \frac{15}{9}$

(2) $6 \times \frac{9}{15}$

(3) $\frac{1}{6} \times \frac{9}{15}$

(4) $\frac{1}{6} \times \frac{15}{9}$

6. Which of the following fractions is larger than $\frac{1}{5}$?

(1) $\frac{3}{10}$

(2) $\frac{2}{11}$

(3) $\frac{3}{15}$

(4) $\frac{2}{30}$

7. The price of a mobile phone is \$200 excluding GST. GST is 7%.
What is the price of the mobile phone including GST?

(1) \$14

(2) \$186

(3) \$207

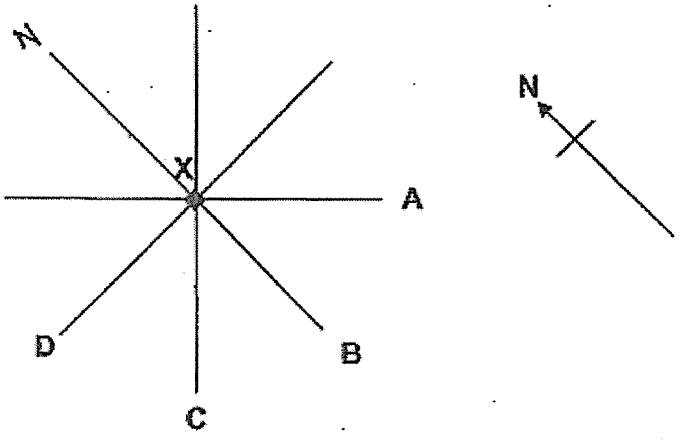
(4) \$214

8. Which of the following figures is not symmetrical?

(1) (2) (3) (4)

9. Muthu is at Point X facing **North**. He turns 135° anti-clockwise. Which direction is he facing now?

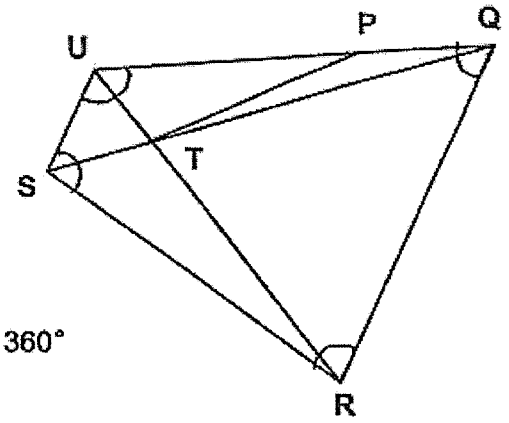
(1) A
(2) B
(3) C
(4) D



10. Express 143 min in hours and minutes.

(1) 1 h 23 min
(2) 1 h 43 min
(3) 2 h 23 min
(4) 2 h 43 min

11. In the figure, UTR and QTS are straight lines. SUQR is a trapezium.
Which of the following statements is false?



(1) $\angle PTU = \angle RTS$ False

(2) $\angle UTS = \angle QTR$

(3) $\angle SUQ + \angle UQR = 180°$

(4) $\angle QRS + \angle RSU + \angle SUQ + \angle UQR = 360°$

12. Mr Raju puts 40 apples into a carton. There are 24 red ones and the rest are green. Find the ratio of the number of green apples to that of the total number of red and green apples.

(1) 2 : 3

(2) 2 : 5

(3) 3 : 2

(4) 3 : 5

13. Jean bought a speaker and a laptop. She spent $2000 altogether. The speaker is 4% of the total cost. What is the cost of the laptop?

(1) $80

(2) $96

(3) $1920

(4) $1996

14. Tom took a flight from Singapore to London. The journey took 13 h 30 min. He reached London at 12.45 p.m. (Singapore time) on Thursday. At what time and which day did his flight take off from Singapore?

(1) 2.15 a.m., Friday

(2) 2.15 p.m., Friday

(3) 11.15 p.m., Thursday

(4) 11.15 p.m., Wednesday

15. Jeremy had 7 ℓ of juice. He drank $\frac{1}{2}$ of it and gave $\frac{1}{4}$ ℓ to his friend. How much juice had he left?

(1) $1\frac{3}{4}$ ℓ

(2) $3\frac{1}{4}$ ℓ

(3) $6\frac{1}{4}$ ℓ

(4) $7\frac{3}{4}$ ℓ

(Go on to Booklet B)

KYS / AS / TMY / SL / CT

Index No. | | | | | | — | |

SINGAPORE CHINESE GIRLS' SCHOOL

PRELIMINARY EXAMINATION 2020

PRIMARY 6

MATHEMATICS
PAPER 1

BOOKLET B

Name : _____( )

Class : Primary 6 SY / C / G / SE / P

18 August 2020

Paper 1	Mark attained	Max Mark
Booklet B		25

15 Questions
25 Marks

Total Time for Booklets A and B: 1 h

INSTRUCTIONS TO CANDIDATES
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
You are not allowed to use a calculator.

Booklet B

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. **(5 marks)**

Do not write in this column

16. 18 : 27 = 4 : ____

Ans: _____

17. What is the value of $408 - 12 \div (2 + 4) \times 4$?

Ans: _____

18. List the common factors of 40 and 45.

Ans: _____

3

19. Find the volume of a 4-cm cube.

Do not in this column

Ans: _____ cm^3

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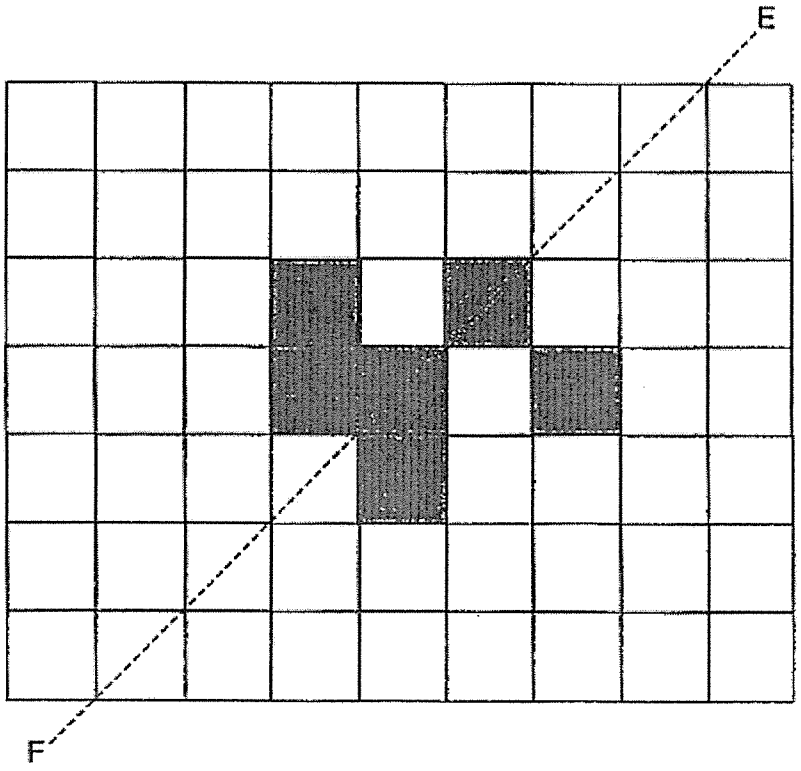
20. In the figure below, dotted line EF is a line of symmetry. Shade 2 more squares to complete the figure.



2

Questions 21 to 30 carry 2 marks each. Show your working clearly in the space for each question and write your answers in the space provided.
For questions which require units, give your answers in the units stated. (20 marks)

Do not write in this column

Use the table below to answer questions 21 and 22.

The table below shows prices of durians and mangoes at a fruit stall.

Item	Price per kg
Durian	$\$ (m + 14)$
Mango	$\$ m$

21. Peter bought 1 kg of durians and 3 kg of mangoes. How much did he spend? Express your answer in terms of m.

Ans: \$ _____

22. Amara spent \$74 on 1 kg of durians and some mangoes.
If $m = 6$, how many kg of mangoes did he buy?

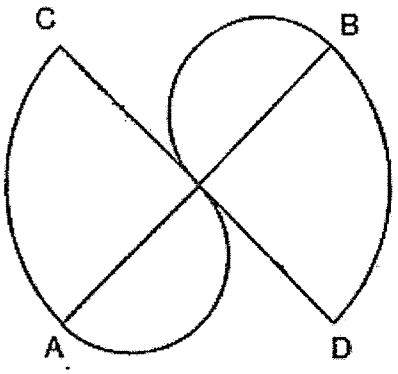
Ans: _____ kg

4

Do not in this column

23. The figure below is made up of 2 identical quadrants and 2 semicircles.

AB = CD = 14 cm. Find the perimeter of the following figure. (Take $\pi = \frac{22}{7}$)



Ans: _____ cm

---

24. Mr Wong bought some green balloons and yellow balloons for his class.

Each of his students used a green balloon and a yellow balloon.

$\frac{2}{5}$ of the green balloons and $\frac{3}{4}$ of the yellow balloons were left.

What fraction of the total number of balloons did his class use?

Ans: _____

4

25. Sammy is twice the age of Tim but half that of Ray.
Given that Ray is 24 years old, what is their average age?

Do not write in this column

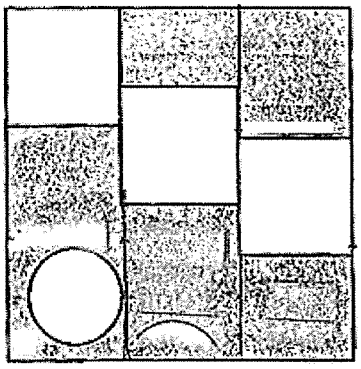
Ans: _____

26. A bookshelf can withstand the weight of either 45 small books or 30 big books. Given that it already contained 24 small books and 8 big books, how many more big books can be place on the bookshelf?

Ans: _____

4

27. The figure is made up of 1 big square, 3 identical small squares and 1 circle. The circle is half the size of a small square.
What fraction of the figure is shaded?



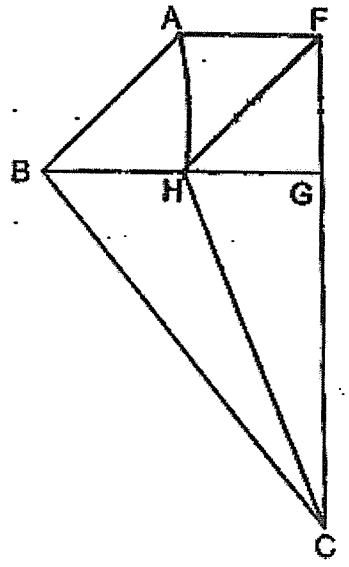
Ans: _____

28. Alyssa cut a piece of ribbon into 2 equal pieces. The total length of $\frac{1}{4}$ of the first piece, $\frac{2}{3}$ of the second piece is 110 cm. What is the original length of the ribbon?

Ans: _____ cm

4

29. The figure below is made up of a parallelogram and triangles.
BH = HG = GF. CG is 3 times the length of GF.
BG and FC are straight lines. Given that FG = 6 cm,
find the area of the figure.



Do not write in this column

Ans: _____ cm^2

2

30. Mr Tan and Mr Nordin had some fruits. 40% of Mr Nordin's fruits were oranges and the rest were apples. 80% of Mr Tan's fruits were oranges and the rest were apples.

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
Mr Nordin had more apples than oranges.			
Mr Tan had 80 oranges.			
Mr Tan had more oranges than Mr Nordin.			

End of Booklet B

2

KYS / (AS) / TMY / SL / CT

Index No. | | | | | | — | |

SINGAPORE CHINESE GIRLS' SCHOOL

PRELIMINARY EXAMINATION 2020

PRIMARY 6

MATHEMATICS

PAPER 2

Name : _____( )

Class : Primary 6 SY / C / G / SE / P

18 August 2020

Paper 2	Mark	Max Mark
		55

Parent's Signature

17 Questions
55 Marks

Total Time for Paper 2: 1 h 30 min

INSTRUCTIONS TO CANDIDATES
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
You are allowed to use the calculator.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. **(10 marks)**

Do not write this column

1 Amy and Bala have 275 beads. If Amy gives Bala 20 beads, Bala will have 10 times as many beads as Amy. How many beads does Amy have?

Ans: _____

2 A farmer had some apples. She gave 1200 apples to her friend and $\frac{3}{8}$ of the remainder to her aunt. She had 150 apples left. How many apples did she have at first?

Ans: _____

4

3. A machine takes $\frac{1}{6}$ of a minute to assemble a phone. How many phones can it assemble in 5 minutes?

Ans: _____

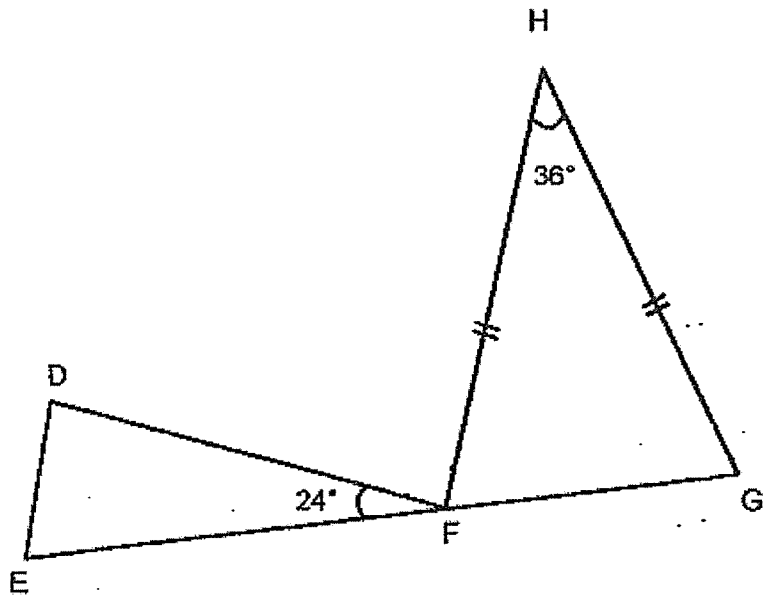
4. Allison's watch is programmed to ring every 5 minutes. Her alarm clock is programmed to ring every 8 minutes. At what time will the 2 devices ring together again given that the last time they rang together was at 10 a.m.?

Ans: _____

/4

5. In the figure below, FHG is an isosceles triangle. EFG is a straight line. Find ∠DFH.

Do not write in this column



Ans: _____ °

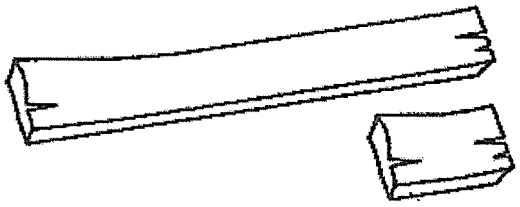
2

For questions **6** to **17**, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [ ] at the end of each question or part-question. **(45 marks)**

6. Tiffany bought some chocolates and sweets. The number of sweets is 3 times the number of chocolates. After giving away 10 sweets and 10 chocolates, the number of sweets is 5 times the number of chocolates. How many chocolates did she buy?

Ans: _____ [3]

7. Mr Lim has big pieces of wood measuring 12.5 m each. He cuts the wood into smaller pieces measuring 30 cm each. He needs 290 small pieces of wood to build a fence. What is the least number of big pieces of wood he needs to build the fence?



Ans: _____ [3]

6

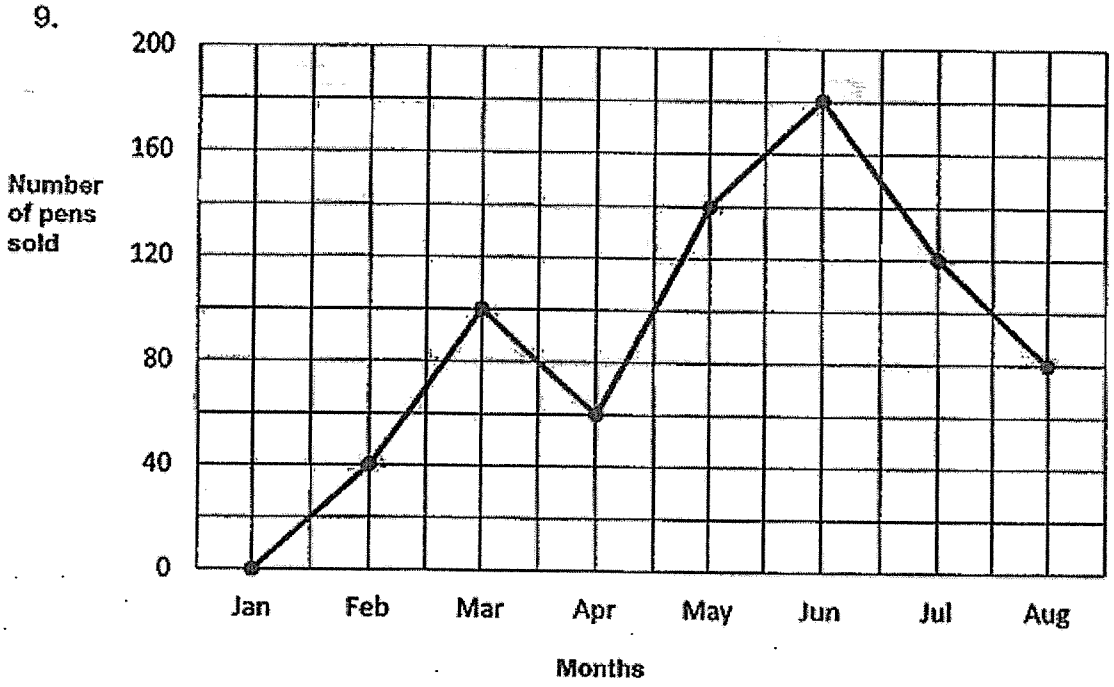
8. Sandra has some lemon and peppermint sweets in a container. $\frac{3}{5}$ of the sweets are peppermint. After she adds in another 30 peppermint sweets, $\frac{3}{4}$ of the sweets are peppermint. How many sweets does she have in the container in the end?

Do not write this column

Ans: _____ [3]

3

9.



The graph above shows the number of pens sold in a shop.

a) The greatest increase in sales happened during which one-month period?

b) Find the percentage decrease from June to July.

Ans: a) _____ to _____ [1]

b) _____ [2]

3

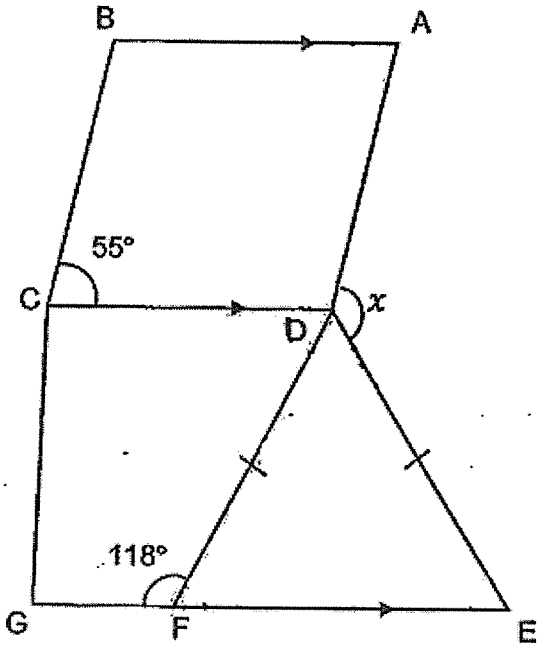
10. Painter A takes 2 h to paint a room. Painter B takes 3 h to paint the same room. How long will they take if they were to paint the room together?

Do not write this column

Ans: _____ [3]

3

11. ABCD is a rhombus. DCGF is a trapezium. DEF is an isosceles triangle. Find $\angle x$.



Ans: _____ [4]

4

12. A bag of kiwis was shared among 3 children, Xavier, Yanny and Zara. Xavier received 40% of the kiwis plus 2 more. Yanny received 50% of the remainder plus 8 more. If Zara received 54 kiwis, how many kiwis were in the bag at first?

Do not write this column

Ans: _____ [4]

4

13. Tables and chairs are arranged in the figures below.

Figure 1

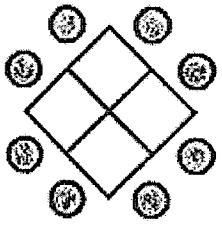


Figure 2

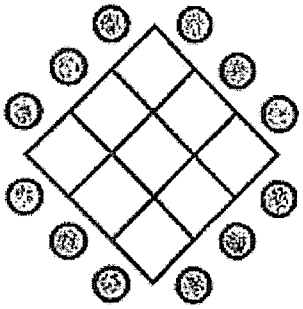


Figure 3

a) Complete the table below.

Figure	Number of tables (squares)	Number of chairs (circles)	Total
1	1	4	5
2	4	8	12
3	9	12	21
4			

[3]

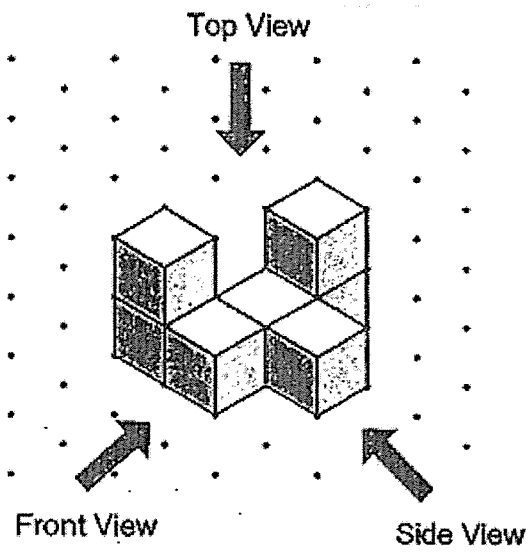
b) What is the total number of tables and chairs needed to form Figure 39?

Ans: b) _____ [2]

5

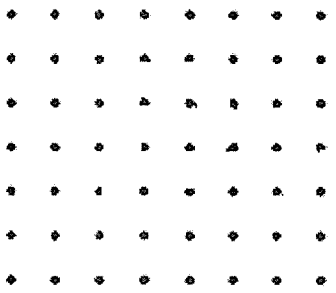
Do not write this column

14. The solid below is made up of 1-cm cubes stacked together.

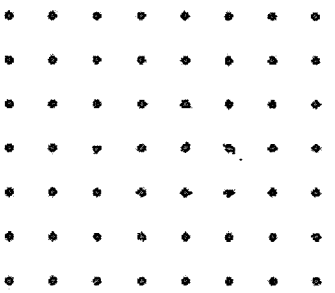


a) Draw the top and front view of the solid on the grid below.

Top View



Front View



[2]

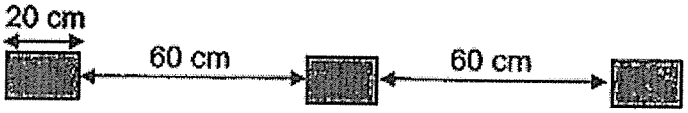
b) From the diagram as shown above, how many more 1-cm cubes are needed to form a 5-cm cube?

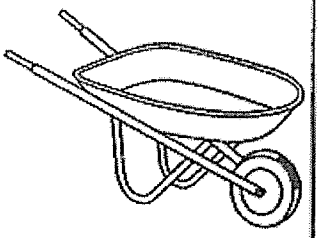
Ans: _____ [2]

4

15 a) A part of the wheel of a wheelbarrow was coated with paint as shown in the diagram. The diagram below showed the marking made by the wheel when it moved through a distance.

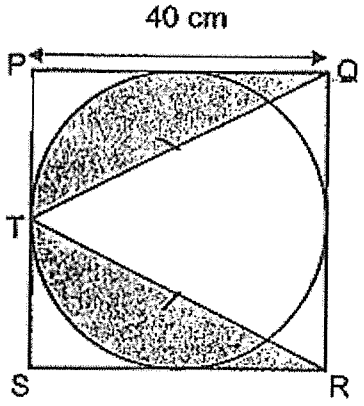
Find the circumference of the wheel.





15 b) PQRS is a square. T is the mid-point of PS. TQ = TR.

Find the area of the shaded parts. (Take π = 3.14)



Ans: a) _____ [2]

b) _____ [3]

5

16 A plate of chicken rice cost $4 while a plate of spaghetti cost $7. Miss Tan ordered plates of chicken rice and spaghetti in the ratio 2 : 5 for her pupils in a camp. She paid $258 in total.

a) How many plates of chicken rice did she order?

b) How much more money did she spend on spaghetti than chicken rice?

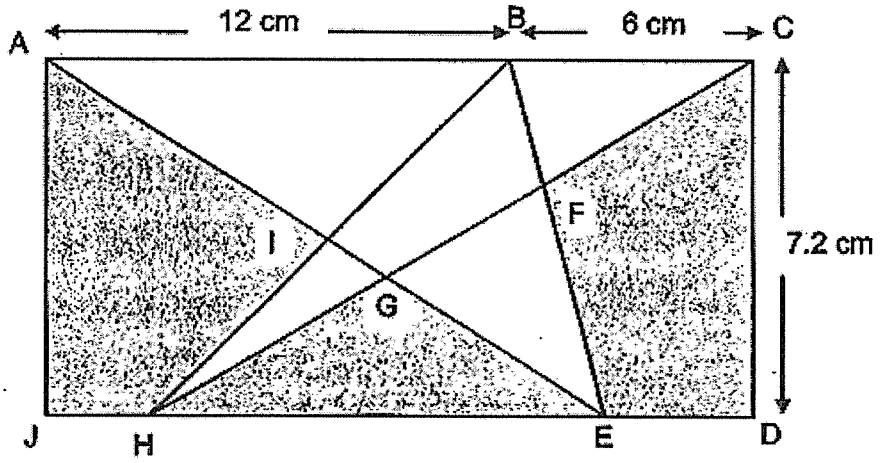
Do not write this column

Ans: a) _____ [2]

b) _____ [2]

4

17. The figure below is made up of a rectangle and triangles. The area of the quadrilateral BFGI is 21 cm^2. Find the area of the shaded part.



Ans: _____ [4]

4

End of Paper

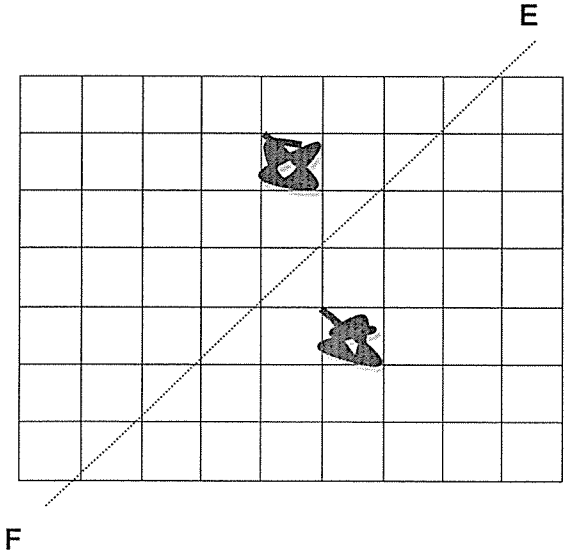
SCHOOL : SCGS PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATH
TERM : 2020 PRELIM

PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	3	3	2	1	1	4	4	3	3

Q 11	Q12	Q13	Q14	Q15
1	2	3	4	2

PAPER 1 BOOKLET B

Q16)	6
Q17)	400
Q18)	1 , 5
Q19)	64 cm3
Q20)	

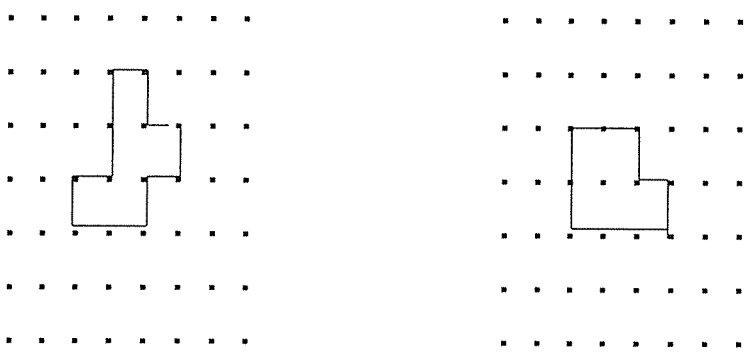
Q21)	Mango →$m x 3 = $3m Durian →$(m + 14) Total →$3m + $(m + 14) = $ (4m + 14)
Q22)	$74 - $20 = $54 $54 ÷ $6 = 9kg
Q23)	Circumference → ¼ x $\frac{22}{7}$ x $\frac{14}{1}$ = 11cm Circumference → ½ x $\frac{22}{7}$ x $\frac{7}{1}$ = 11 11 x 4 = 44 7 x 2 = 14 44 + 14 = 58
Q24)	$\frac{3}{5}$ + ¼ = $\frac{3}{5}$ = $\frac{3}{12}$ = $\frac{6}{17}$
Q25)	4u →24 1u→24 ÷4 = 6 7u→6 x 7 = 42 Average→ 42 ÷ 3 = 14
Q26)	6
Q27)	$\frac{7}{18}$
Q28)	1st piece→ ¼ = $\frac{3}{12}$ 2nd piece→$\frac{2}{3}$ = $\frac{8}{12}$ 3u + 8u = 11u 11u→110 24u→$\frac{110}{11}$ x 24 = 240 cm
Q29)	A→6 x 6 = 36 D→6 x 6 x ½ = 18 C+B→12 x 18 x ½ = 108 A+D+C+B→36 + 18 + 108 = 162 cm2

Q30)

	True	False	Not possible to tell
Mr Nordin had more apples than oranges	√		
Mr Tan had 80 oranges			√
Mr Tan had more oranges than Mr Nordin			√

PAPER 2

Q1)	10u + 1u = 11u 1u→275 ÷ 11 = 25 25 + 20 = 45
Q2)	5u→150 1u→150 ÷5 = 30 8u→30 x 8 = 240 At first→240 + 1200 = 1440
Q3)	10 seconds → 1 phone 60 seconds → 6 phones 1min →6 phones 5 mins→6 x 5 = 30
Q4)	10 40 a.m.
Q5)	180° – 36° = 144° 144° ÷2 = 72° 180° – 72° – 24° = 84°
Q6)	1u →10 2u→10 x 2 = 20
Q7)	12.5m = 1250cm 1250 ÷ 30 ≈ 41 290÷ 41 ≈ 8

Q8)	3u→30 1u→30 ÷3 = 10 8u→10 x 8 = 80
Q9)	a)April to May b)$\frac{60}{180}$ x 100% = $33\frac{1}{3}$ %
Q10)	5 rooms→6 hours 1 room→1.2 hours 1.2 hours = 1h 12 mins
Q11)	360° – 55° – 55° = 250° 250° ÷2 = 125° 180° – 118° = 62° 180° – 62° – 62° = 56° $\angle$ X→ 360° – 62° – 125° – 56° = 117°
Q12)	50% →8 + 54 = 62 100% →62 x 2 = 124 Total 60% →124 + 2 = 126 100% →$\frac{126}{60}$ x 100 = 210
Q13)	a)16 , 16 , 32 b)39 x 39 = 1521 circles →39 x 4 = 156 Total →1521 + 156 = 1677
Q14)	a)  b)5 x 5 x 5 = 125 125 – 7 = 118

Q15)	a)20 cm + 60 cm = 80 cm b)Area of A → ½ x 40cm x 40cm = 800cm2 square→40cm x 40cm = 1600cm2 circle→3.14 x 20cm x 20cm = 1256cm2 1600cm2 – 1256cm2 = 344cm2 344cm2 ÷4 = 86cm2 Shaded→1600cm2 – 86cm2 – 86cm2 – 800 cm2 = 628cm2
Q16)	Chicken : spaghetti 2 : 5 1set→(2x4) + (5x7) = 43 No.of sets→258 ÷43 = 6 Plates of chicken rice→6x 2 = 12 Plates of spaghetti → 6 x 5 = 30 Diff→(30x7) – (12x4)= 162
Q17)	Area ACDJ→18 x 7.2 = 129.6 Area DABC→ ½ x 12 x 7.2 = 43.2 Area ABCH→ ½ x 6 x 7.2 = 21.6 Unshaded→ 43.2 + 21.6 – 21 = 43.8 Shaded→129.6 – 43.8 = 85.8cm2

2020 PRIMARY 6 – PRELIMINARY EXAMINATION

Name: _____ ( ) Date: 20 August 2020

Class: Primary 6 ( ) Time: 8.00 a.m. - 9.00 a.m.

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS
PAPER 1
(BOOKLET A)

20

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

Questions **1** to **10** carry 1 mark each. Questions **11** to **15** carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4).
Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

---

1. Farmer Brown harvested 109 436 oranges last year.
Express this number to the *nearest hundred thousand.*

(1) 100 000
(2) 109 000
(3) 110 000
(4) 109 400

2. $20 + \frac{7}{10} + \frac{7}{1000} =$ _____.

(1) 20.007
(2) 20.077
(3) 20.707
(4) 20.770

3. There are 70 adults and children in a hall. 56 are adults. What is the ratio of the number of children to the total number of people in the hall?

(1) 1 : 4
(2) 1 : 5
(3) 4 : 1
(4) 4 : 5

4. $3 : 9 = 4 : \square$

What is the missing number in the box?

(1) 10

(2) 12

(3) 27

(4) 36

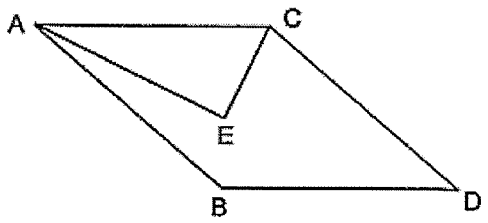
5. Which two lines in the figure are perpendicular to each other?

(1) AC and CD

(2) AB and CD

(3) AE and CE

(4) AC and BD



6. My teacher paid $25 for 50 notepads. How much did each notepad cost?

(1) 5 cents

(2) 2 cents

(3) 50 cents

(4) 20 cents

7. Round each of the numbers to the nearest whole number.

What is the estimated value?

32.6 + 40.4 x 9.51

(1) 430

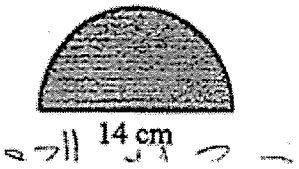
(2) 433

(3) 700

(4) 730

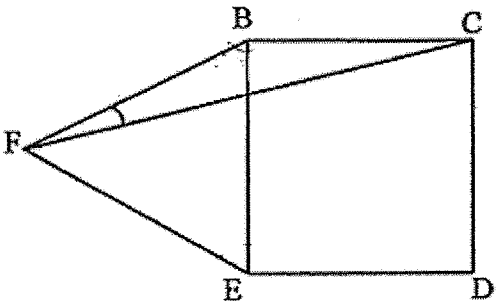
8. Find the perimeter of the semicircle. (*Take* $\pi = \frac{22}{7}$)

(1) 22 cm
(2) 36 cm
(3) 44 cm
(4) 58 cm



9. In the figure, BCDE is a square and BEF is an equilateral triangle.
Find ∠BFC.

(1) 15°
(2) 30°
(3) 45°
(4) 60°

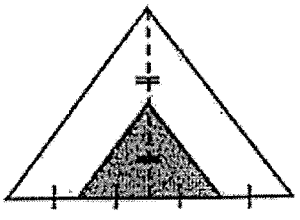


10. The mass of Box A is 6 kg. The total mass of Box B and Box C is also 6 kg.
What is the average mass of the 3 boxes?

(1) 6 kg
(2) 2 kg
(3) 3 kg
(4) 4 kg

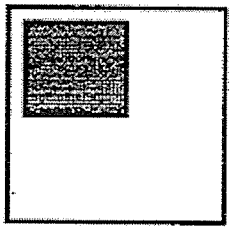
11. What percentage of the triangle is unshaded?

(1) 25%
(2) 40%
(3) 50%
(4) 75%



12. A small square is placed over a large square. The length of each square is a whole number. The area of the large square that is not covered by the small square is 56 cm^2. What is the perimeter of the large square?

(1) 44 cm
(2) 40 cm
(3) 36 cm
(4) 20 cm



13. A wire is cut into 2 pieces. One piece is made into an equilateral triangle of sides y cm long. The other piece is made into a square of sides 8 cm long. What is the length of the wire before it is cut?

(1) $(y + 8)$ cm
(2) $(3y + 64)$ cm
(3) $(3y + 32)$ cm
(4) $(4y + 24)$ cm

14. A supermarket gave a discount of \$3 for every \$40 spent.
Mr Lim bought some groceries and paid \$119.
What was the price of the groceries before the discount?

(1) \$125
(2) \$128
(3) \$141
(4) \$156

15. In the figure, ABCD is a square, CE = CD and $\angle EDC = 68°$.

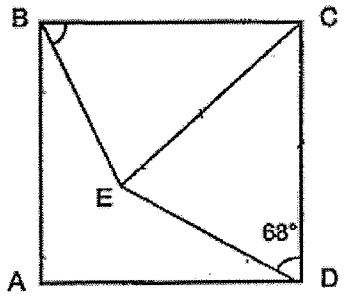
Find $\angle CBE$.

(1) 44°

(2) 46°

(3) 67°

(4) 68°



End of Booklet A

Go on to Booklet B

2020 PRIMARY 6 – PRELIMINARY EXAMINATION

Name: _____ ( ) Date: 20 August 2020

Class: Primary 6 ( ) Time: 8.00 a.m. - 9.00 a.m.

Parent's Signature: _____

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS
PAPER 1
(BOOKLET B)

25

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.
6. You are **not** allowed to use a calculator.

Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

16. Find the value of $40.04 \div 8$.

Ans: _____

17. Janet completed a race in 148 seconds.
She was 15 seconds slower than Stella.
How long did Stella take to complete the race?

Ans: _____ min _____ s

18. The table below shows the charges for a cleaning service.

First 2 hours	$100
Every additional hour	$30

Mdm Lee paid the shop $160 to clean her house.
How many hours of cleaning did she pay for?

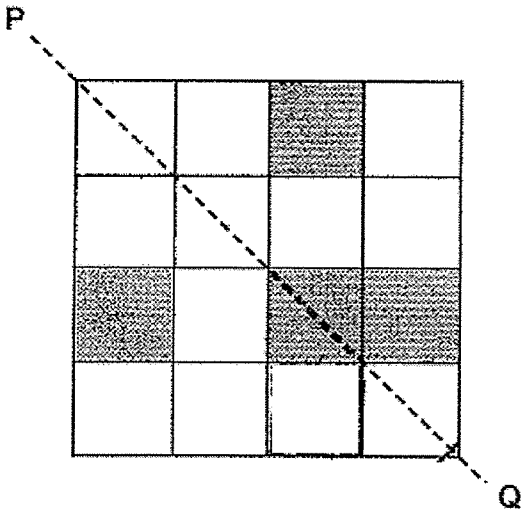
Ans: _____ h

10. Express 0.5% as a fraction in the simplest form.

Ans: _____

---

20. In the figure, PQ is the line of symmetry.
Shade a unit square to make the figure symmetrical.



Questions **21** to **30** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

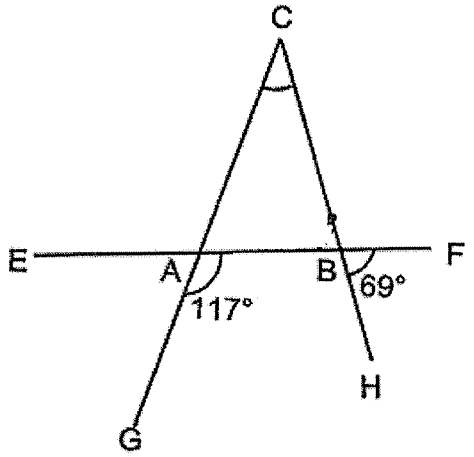
21. Alan is less than 50 years old. His age is a multiple of 5.
Next year, his age is a multiple of 7. How old is he now?

Ans: _____ years old

22. At a party, there were 25% more men than women. There were 180 adults at the party. How many men were there?

Ans: _____

23. The figure below is not drawn to scale. EF, CG and CH are straight lines.
$\angle GAB$ is 117° and $\angle FBH$ is 69°.
Find $\angle ACB$.



Ans: _____ °

24. Sally had 2 boxes of beads. After transferring $\frac{1}{7}$ of the beads from Box A to Box B, the ratio of the number of beads in Box A to the number of beads in Box B becomes 3 : 7. What is the ratio of the number of beads in Box A to the number of beads in Box B at first?

Ans: ____ _____

---

25. 4 people can sit at a square table, one at each side of the table. 6 people can sit at two square tables joined together. How many tables are needed to form a long table for 50 people?

Ans: _____

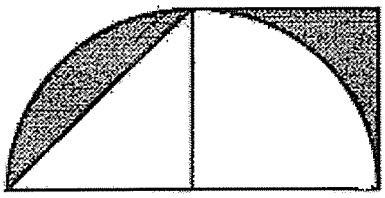
---

26. Alan spent $\frac{1}{3}$ of his pocket money on a shirt and 15% of the remainder on a book. What fraction of his allowance did he spend in all?

Ans: _____

---

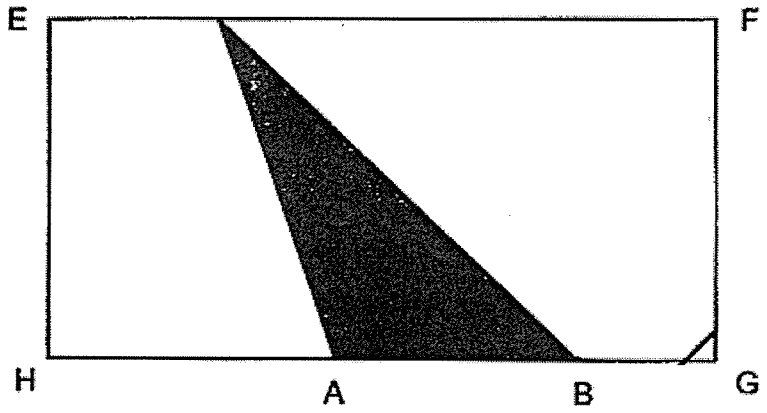
27. The figure is made up of a square and a semicircle.
Find the shaded area.



Ans: _____ cm^2

---

30. The length of HG is thrice the length of AB.
The shaded triangle is 13 cm². Find the area of Rectangle EFGH.



Ans: _____ cm²

End of Booklet B

End of Paper 1

2020 PRIMARY 6 – PRELIMINARY EXAMINATION

Name: _____ (Date: 20 August 2020

Class: Primary 6 ( ) Time: 10.30 a.m. - 12.00 noon

Parent's Signature: _____

MATHEMATICS

PAPER 2

55

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Show your working clearly as marks are awarded for correct working.
6. You are allowed to use a calculator.

Questions **1** to **5** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

1. What is the missing number in the box?

$140 \div 20 \times \square + (180 - 120) = 270.$

Ans: _____

2. $\frac{3}{5}$ of Lily's savings is equal to $\frac{7}{12}$ of Janet's savings.

What is the ratio of Janet's savings to Lily's savings?

Ans: _____

3. At first, Aaron and Ben were facing the same direction. Aaron then turned 225° clockwise to face North-West while Ben turned 90° clockwise.

What direction did Ben face in the end?

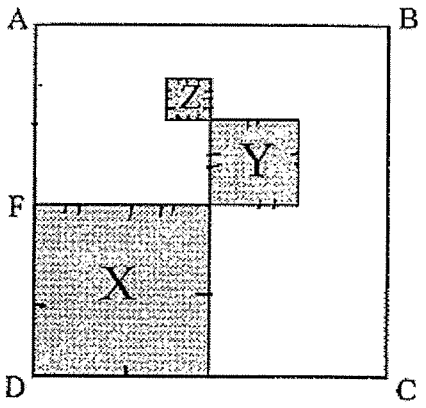
Ans: _____

4. Alice is 5v years old. Beatty is 18 years younger than Cally.
Alice is 2v years older than Beatty.
Find, in terms of v, the total age of the 3 children in 2 years' time.

Ans: _____ years old

---

5. X, Y and Z are squares in the big square, ABCD. AF = FD.
The length of Y is half the length of X. The length of Y is twice the length of Z.
What fraction of the figure is shaded?



Ans: _____

For questions **6** to **17**, show your working clearly in the space provided for each question and write your answers in the spaces provided.
The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

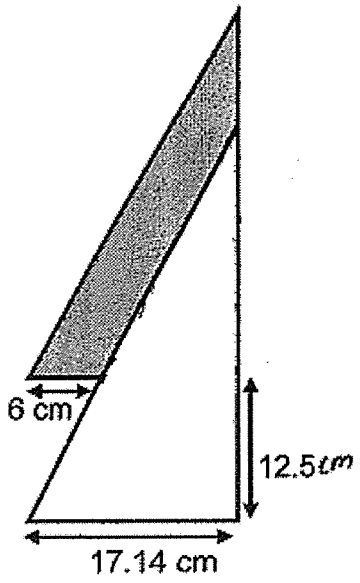
---

6. The length of AE is 3.3 m. B is the midpoint of AC. C is the midpoint of BD and D is the midpoint of BE. What is the length of DE in centimetres?

Ans: _____ _____ [3]

---

7. The figure below shows two identical right-angled triangles overlapping each other. Find the shaded area.



Ans: _____ [3]

---

8. Denise bought 9 more 26-cent stickers than 32-cent stickers from an online shopping website. She spent a total of $12.78 on these stickers.
How many 26-cent stickers did Denise buy?

Ans: _____ [3]

---

9. Mrs Lee went to a sale and paid a total of $600 for a watch and a necklace. The watch was sold to her at a 20% discount. The total discount given for these 2 items was $140. Mrs Lee paid $120 more for the necklace than the watch.
What was the original price of the necklace?

Ans: _____ [3]

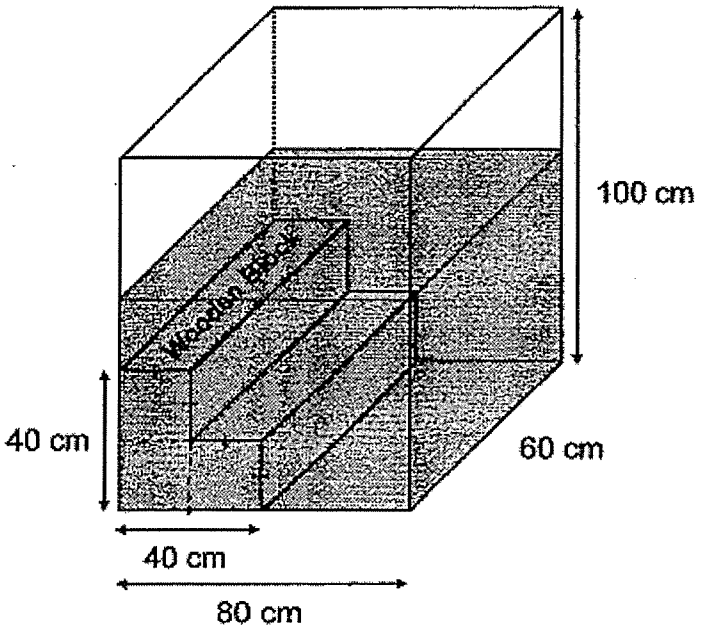
---

10 Frank had to make 200 toy cars. He made 8 toy cars each day from Monday to Friday and 15 each day on Saturday and Sunday. Starting on a Thursday, on which day of the week did Frank complete making all the toy cars?

Ans: _____ [3]

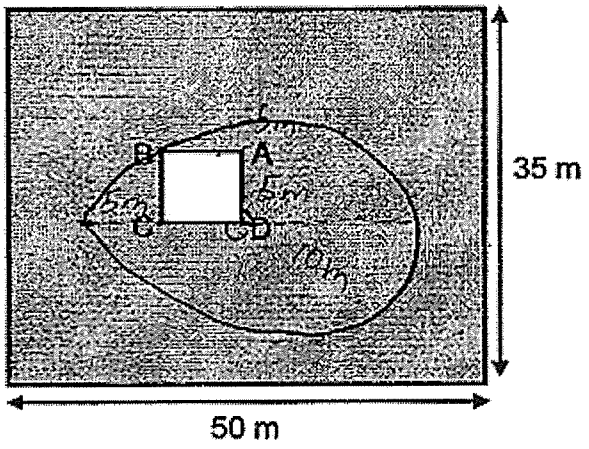
11. The figure shows a rectangular aquarium. with no matter at first
then
It is ~~to be~~ filled with water up to $\frac{3}{5}$ its height.

How many *litres* of water is needed?



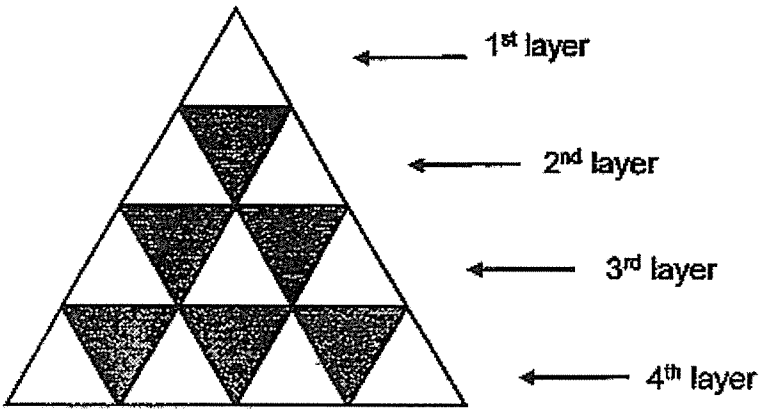
Ans: _____ [4]

12 ABCD is a 5 m by 5 m square house built in a field.
The field is 50 m long and 35 m wide. A dog is tied to Corner D of this house with a rope of length 10 m long.
Find the maximum area in the field that this dog can move within.
(Take $\pi = 3.14$)



Ans: _____ [4]

13. The figure is made up of identical triangles.



Study the above pattern carefully.

(a) How many triangles are there in the 10th layer ?

(b) How many shaded triangles are there in the 100th layer ?

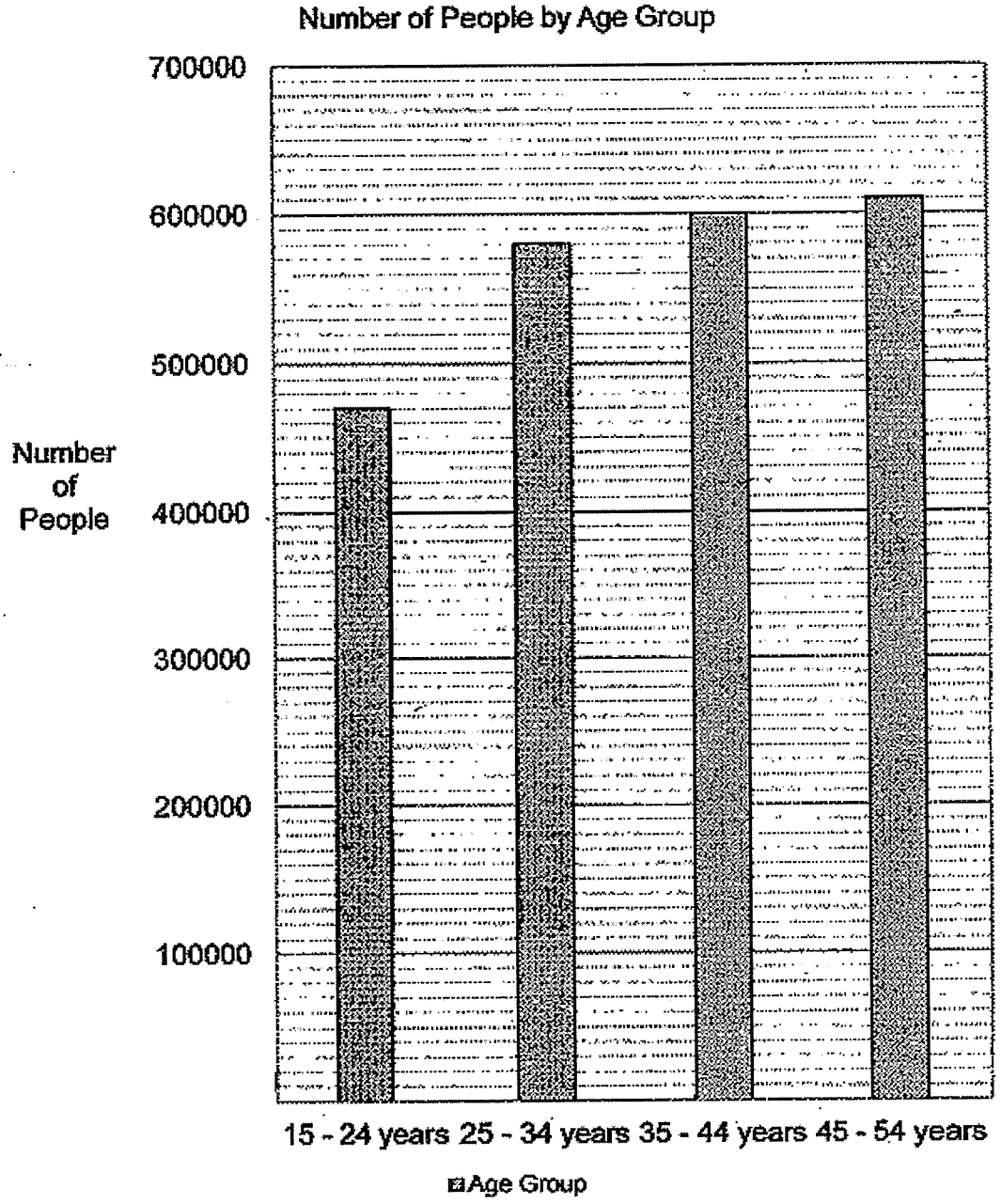
(c) In which layer will you find 109 triangles ?

Ans (a) _____ [1]

(b) _____ [1]

(c) _____ layer [2]

14. The bar graph shows the number of people in the different age groups.



The table below shows the percentage of people in the different age groups who are online food delivery users.

Age Group	15 – 24 years	25 – 34 years	35 – 44 years	45 – 54 years
Percentage of online food delivery users	18	31	26	17

(a) Which age group has the most number of people?

(b) Which age group has the least number of online food delivery users?

(c) The amount of money spent by online food delivery users aged 15 to 24 years old is $115 000 000. What is the average amount of money spent by each of the users in this age group?
Give your answer to the nearest whole number.

Ans: (a) ____ to ____ years old [1] 1

(b) ____ to ____ years old [1] 1

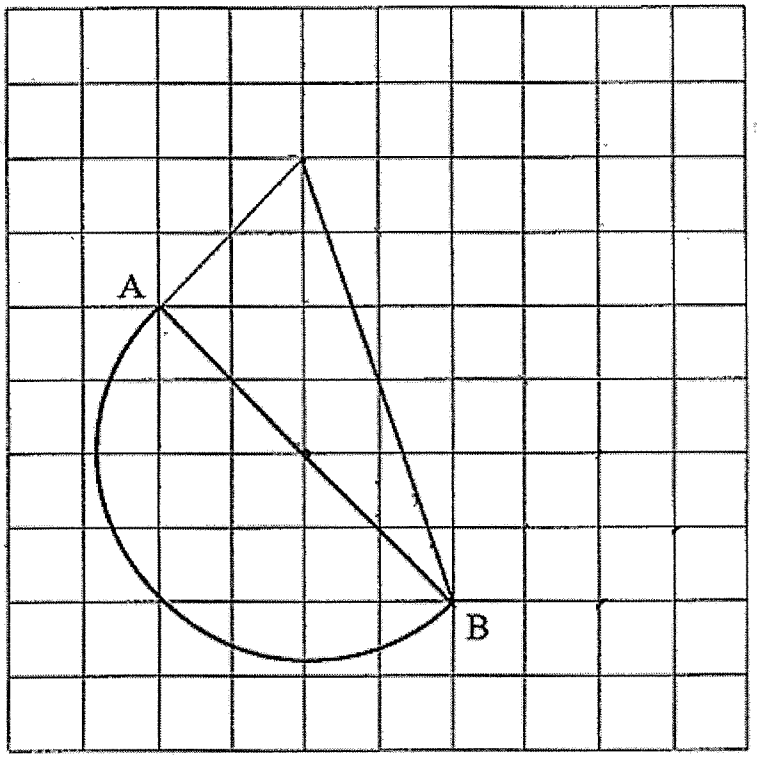
(c) _____ [2] 0

15. A semicircle is drawn on a square grid.

(a) Measure and write down the length of the radius of the semicircle.

(b) Draw a rectangle ABCD such that the length of BC is equal to the length of the radius.

(c) Join BD and measure ∠ABD

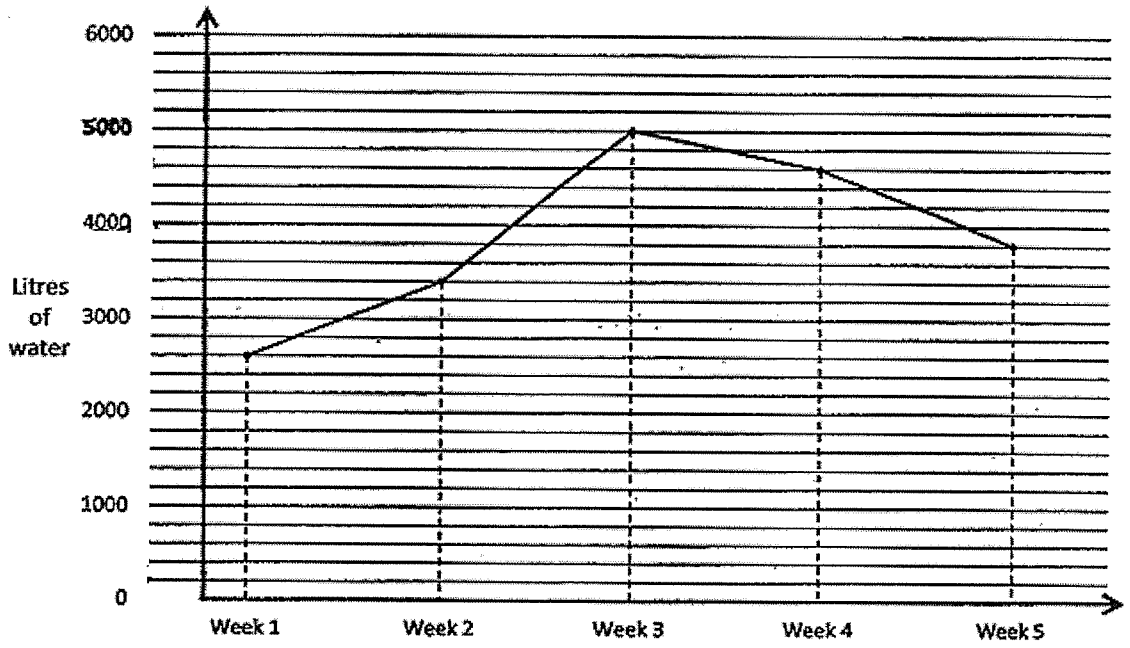


Ans: (a) Radius = _____ [1]

(b) *Drawing of Rectangle ABCD* [2]

(c) ∠ABD = _____ [1]

16. Mr and Mrs Tan lived with their four children in a 5-room flat.
The line graph showed the total water usage each week for Mr Tan's family.



(a) There was a sharp increase in water usage from Week _____ to Week _____.

(b) Find the average water usage for each week.

(c) Each statement below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) in the correct column. [2 marks]

	True	False	Not Possible to Tell
(i) The average water usage for each member in a week was 700 litres.			
(ii) The reason that the water usage increased from Week 1 to Week 2 was due to a leak in the water pipe.			

Ans : (a) Week _____ to Week _____ [1]

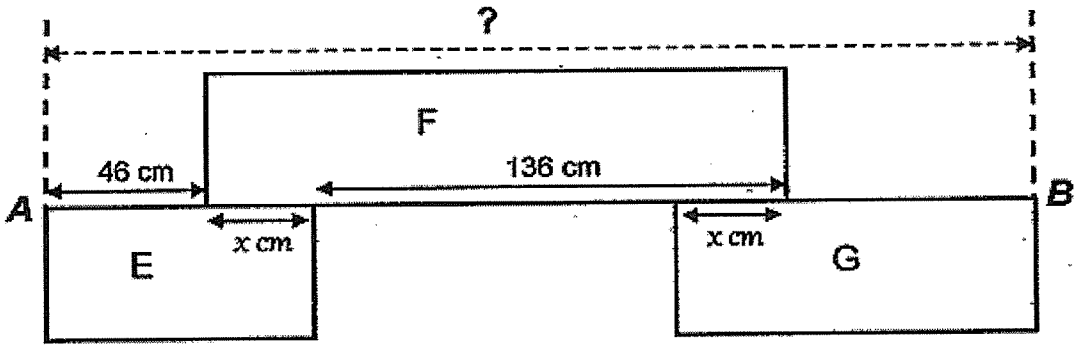
(b) _____ [2]

17. The figure below is made up of 3 different rectangles with identical breadth.

The length of Rectangle E is $\frac{5}{11}$ the length of Rectangle F.

The length of Rectangle G is $\frac{1}{2}$ of the total length of Rectangle E and Rectangle F.

Find the length AB of the figure.



Ans: _____ [5]

End of Paper 2

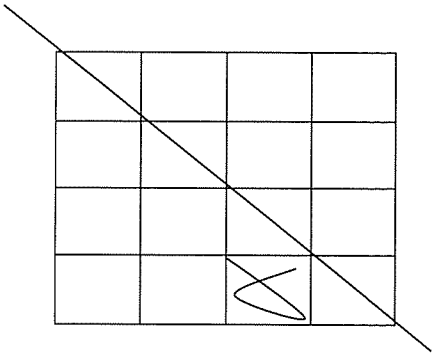
SCHOOL : TAO NAN PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2020 PRELIM

PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	3	2	2	3	3	2	2	1	4

Q 11	Q12	Q13	Q14	Q15
4	3	3	2	3

PAPER 1 BOOKLET B

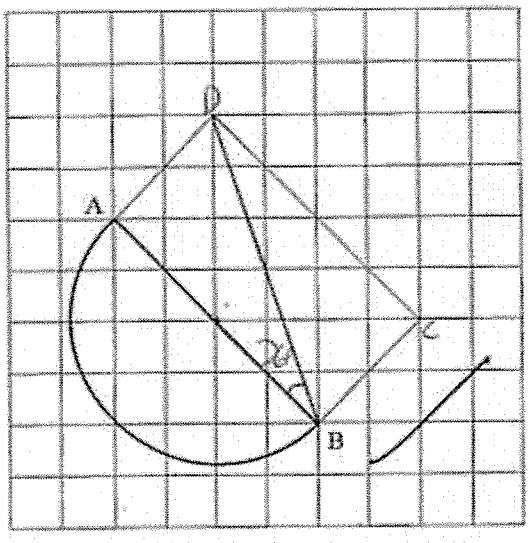
Q16)	5.005
Q17)	148 – 15 = 133 133s = 2 min 13s
Q18)	160 – 100 = 60
Q19)	$\frac{1}{200}$
Q20)	
Q21)	20 years old

Q22)	100
Q23)	48°
Q24)	7 : 13
Q25)	50 – 2 = 48 48 ÷ 2 = 24
Q26)	$\frac{13}{30}$
Q27)	2 cm2
Q28)	Missing page
Q29)	Missing page
Q30)	78cm2

PAPER 2

Q1)	270 – 60 = 210 210 ÷ 7 = 30
Q2)	36 : 35
Q3)	South
Q4)	2 x 3 = 6 5u – 2u = 3u 3u + 18 + 5u + 3u + 6 = (11u + 24)
Q5)	4units x 2 = 8 units 8 units x 8 units = 64 units2 1 unit x 1 unit = 1units2 2 units x 2 units = 4 units2 4 units x 4units = 16 units2 1 units2 + 1 units2 + 16 units2 = 21 units2 $\frac{21\ units2}{64\ units2} = \frac{21}{64}$
Q6)	1 unit x 3 + 2 units = 5 units 3.3m = 330cm 330 ÷ 5 = 66 66 x 2 = 132cm
Q7)	11.14 x 12.5 = 139.25 ½ x 6 x 12.5 = 37.5 37.5 + 139.25 = 176.75cm2

Q8)	9 x 26 = 234 1278 – 234 =1044 26 + 32 = 58 1044 ÷58 = 18 18 + 9 = 27
Q9)	(600 – 120) ÷2 = 240 240 ÷80 = 3 3 x 100 = 300 300 – 240 = 60 140 – 60 = 80 240 +120 = 360 360 + 80 = $440
Q10)	Tuesday
Q11)	40÷2 = 20 3 x 20 x 20 x 60 = 72000 $\frac{3}{5}$ x 100 = 60 60 x 60 x 80 = 288000 288000 – 72000 = 216000 216000cm3 = 216000ml 216000ml = 216L
Q12)	¾ x big circle + ½ x small circle = ¾ x 3.14 x 10m x 10m + ½ x 3.14 x 5m x 5m =274.75m2
Q13)	a)19 b)99 c)(109 – 1) ÷2 = 54 54 + 1 = 55
Q14)	a)45 to 54 b)15 to 24 c)100% → 47000 1% -→47000 ÷ 100 = 470 18% →470 x 18 = 8460 (deverily) $11500000 ÷ 8400 ≈ $13593.381 ≈ $13593

Q15)	a)2.9cm b)  c)26°
Q16)	a)2 to 3 week b)2600 + 3400 + 3800 + 4600 + 5000 = 19400 19400 ÷ 5 = 3880
Q17)	11 units – 5 units = 6 units 6 untis = 136 – 46 = 90 1 unit = 90 ÷ 6 = 15 11units = 15 x 11 = 165 165 + 46 = 211 165 – 136 = 29 165 + 29 + 46 = 240 240 ÷ 2 = 120 120 – 29 = 91 46 + 29 + 136 + 91 = 302cm