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

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

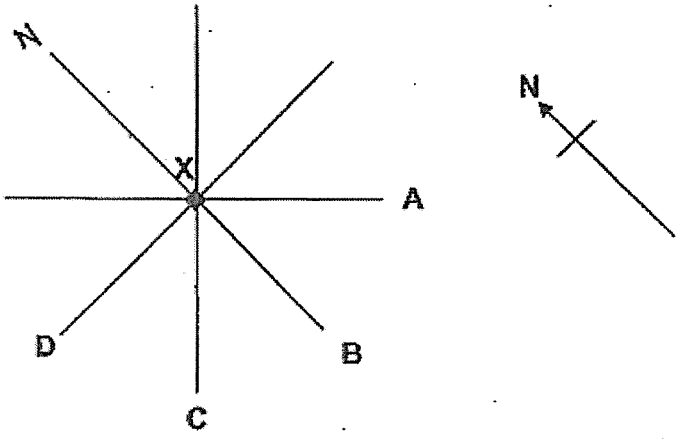
(4) \$214

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?

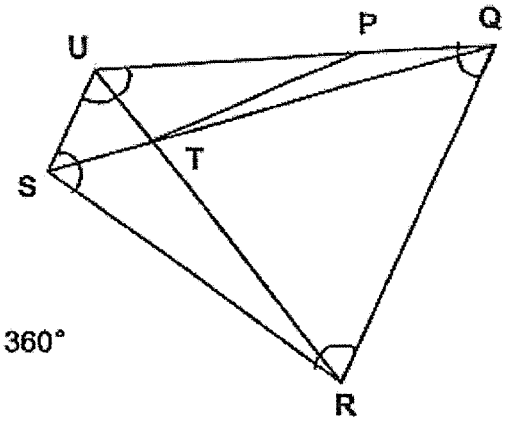
(1) A
(2) B
(3) C
(4) D



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: _____

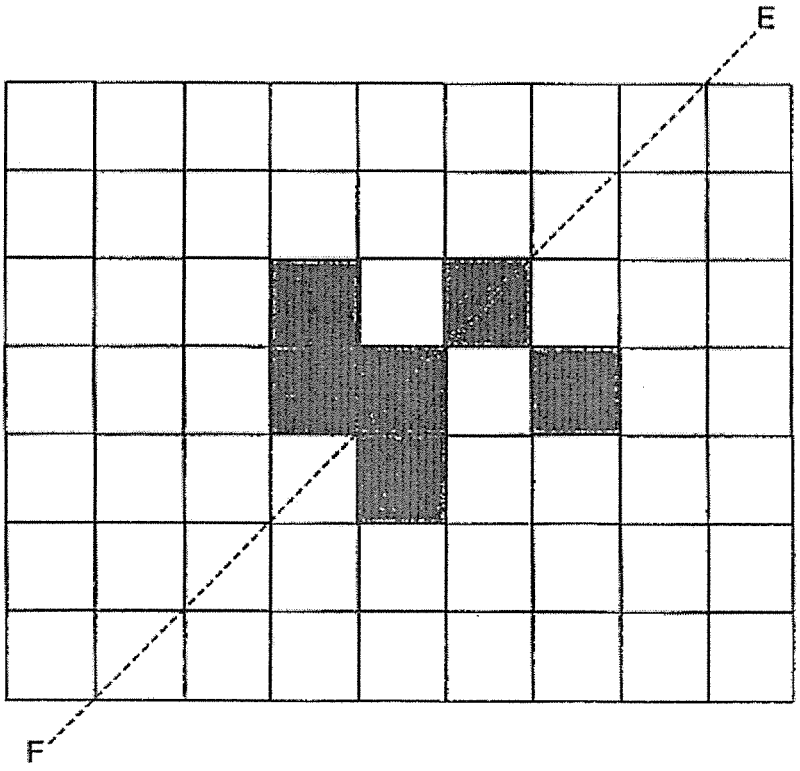
3

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

Do not in this column

Ans: _____ cm^3

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?

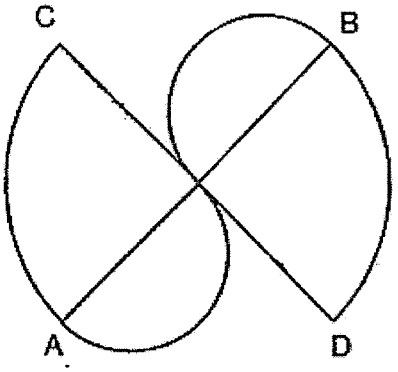
Ans: _____ kg

4

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 $\pi = \frac{22}{7}$)

Do not in this column



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

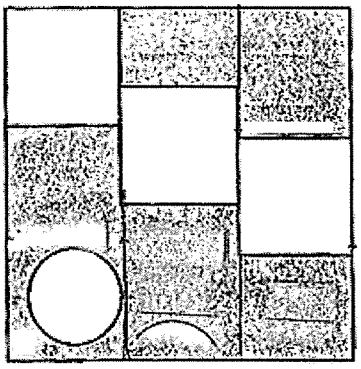
Ans: _____

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: _____

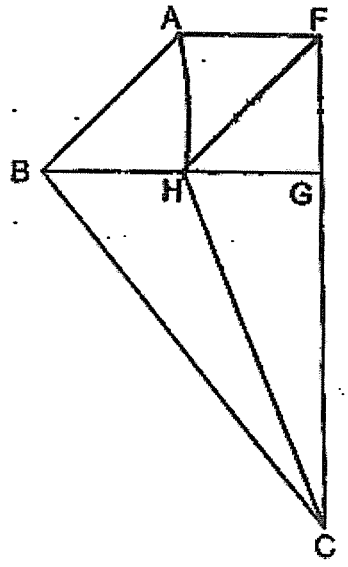
28. Alyssa cut a piece of ribbon into 2 equal pieces. The total length of $\frac{1}{4}$ of the first piece, $\frac{2}{3}$ of the second piece is 110 cm. What is the original length of the ribbon?

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: _____

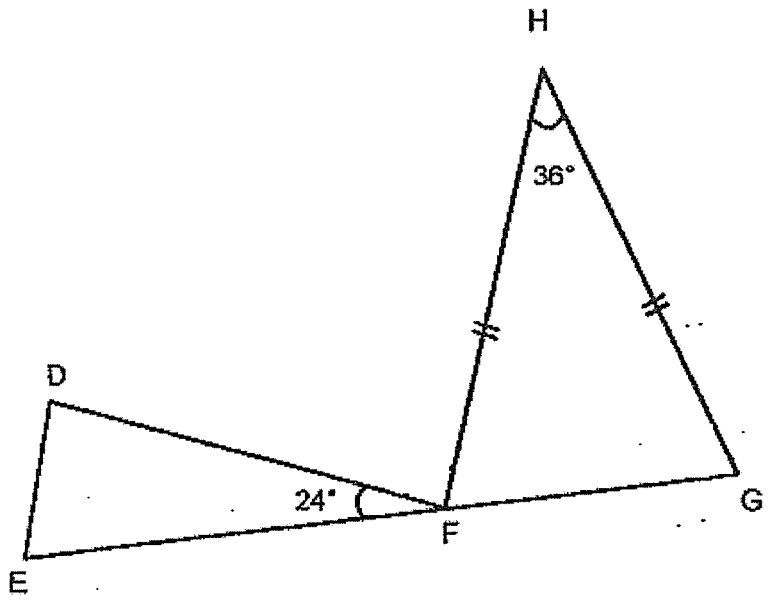
4. Allison's watch is programmed to ring every 5 minutes. Her alarm clock is programmed to ring every 8 minutes. At what time will the 2 devices ring together again given that the last time they rang together was at 10 a.m.?

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: _____ °

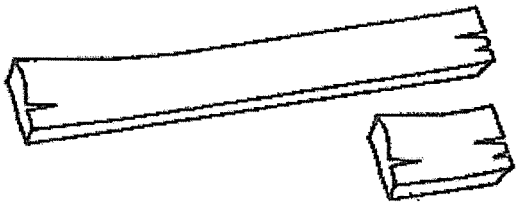
2

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

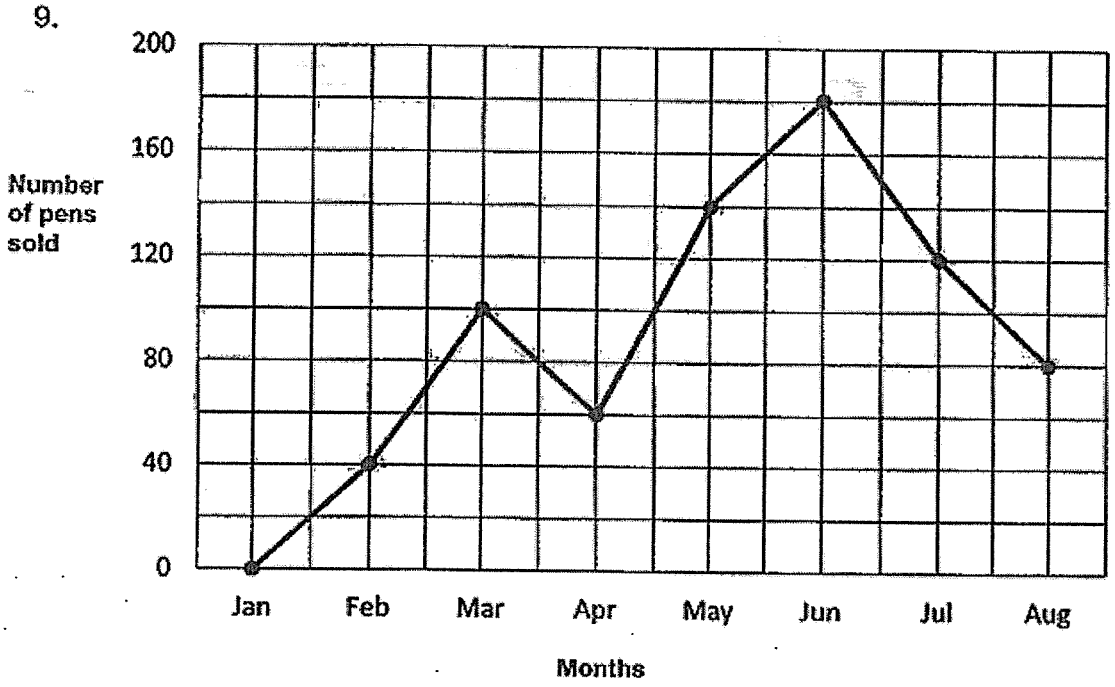
8. Sandra has some lemon and peppermint sweets in a container. $\frac{3}{5}$ of the sweets are peppermint. After she adds in another 30 peppermint sweets, $\frac{3}{4}$ of the sweets are peppermint. How many sweets does she have in the container in the end?

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

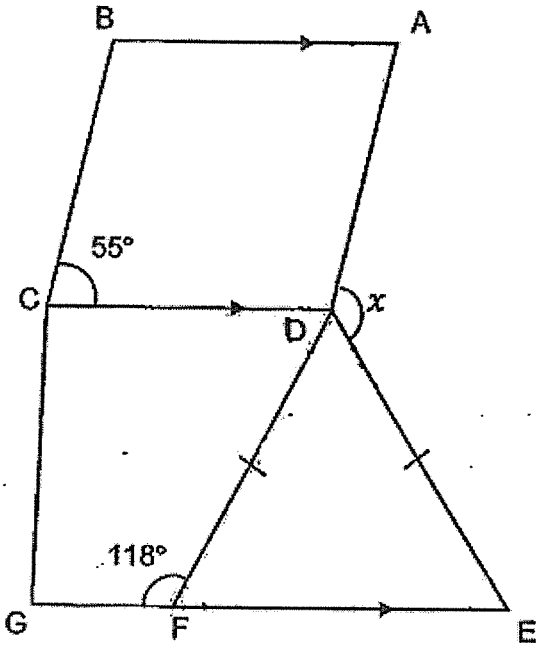
10. Painter A takes 2 h to paint a room. Painter B takes 3 h to paint the same room. How long will they take if they were to paint the room together?

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.

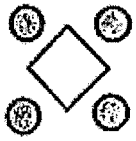


Figure 1

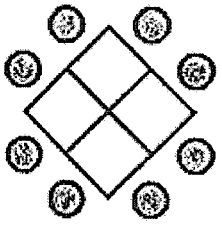


Figure 2

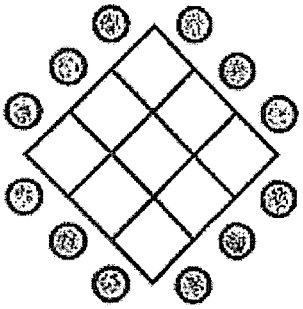


Figure 3

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]

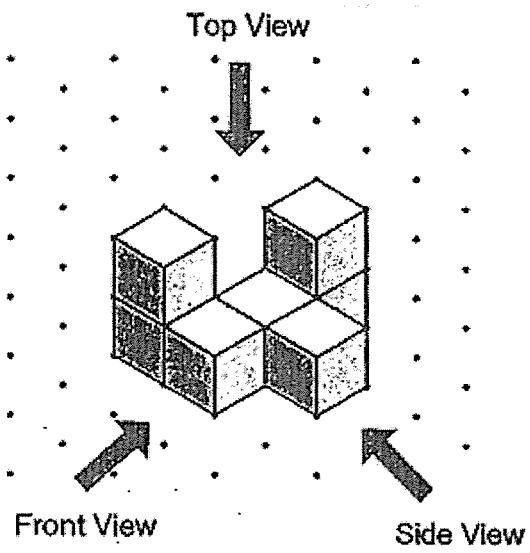
b) What is the total number of tables and chairs needed to form Figure 39?

Ans: b) _____ [2]

5

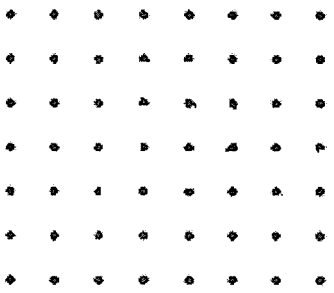
Do not write this column

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

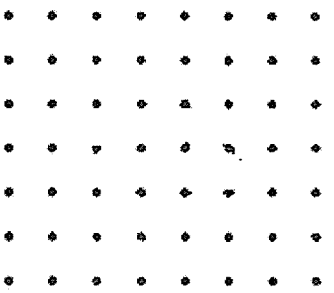


a) Draw the top and front view of the solid on the grid below.

Top View



Front View



[2]

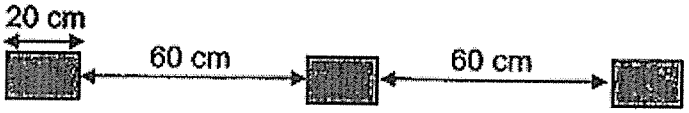
b) From the diagram as shown above, how many more 1-cm cubes are needed to form a 5-cm cube?

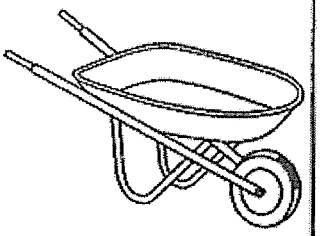
Ans: _____[2]

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.

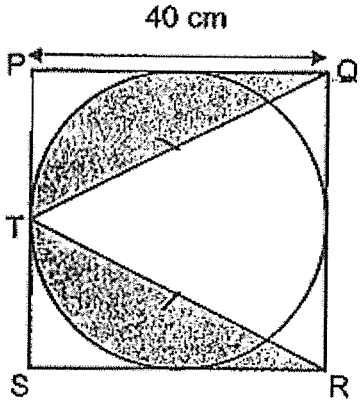
Find the circumference of the wheel.





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?

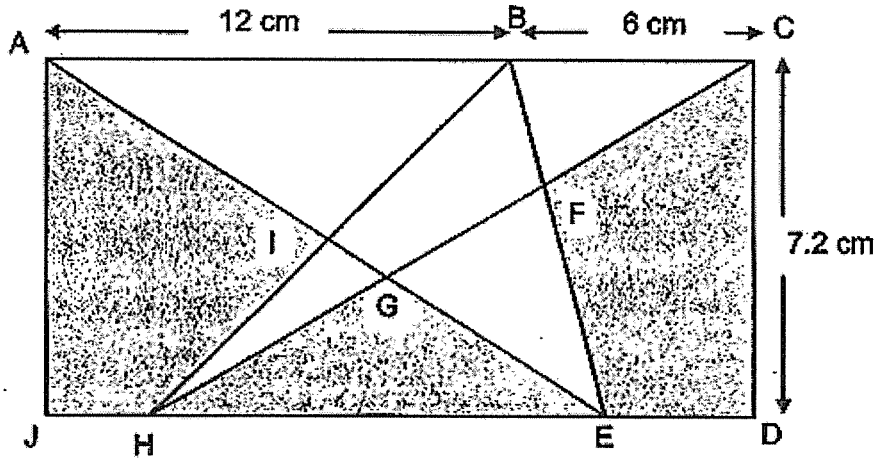
Do not write this column

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

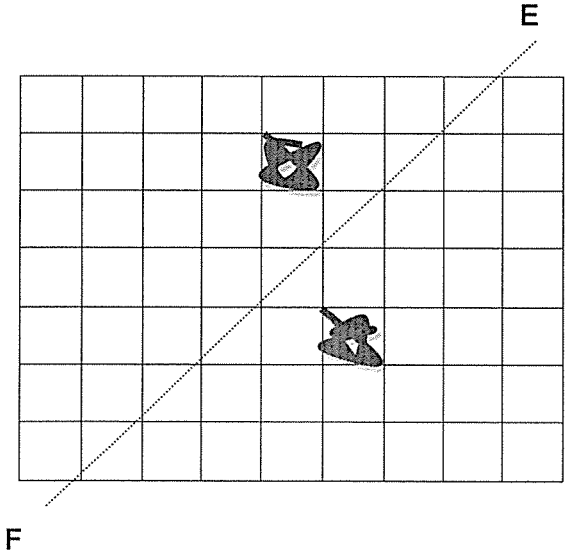
SCHOOL : SCGS PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATH
TERM : 2020 PRELIM

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)	

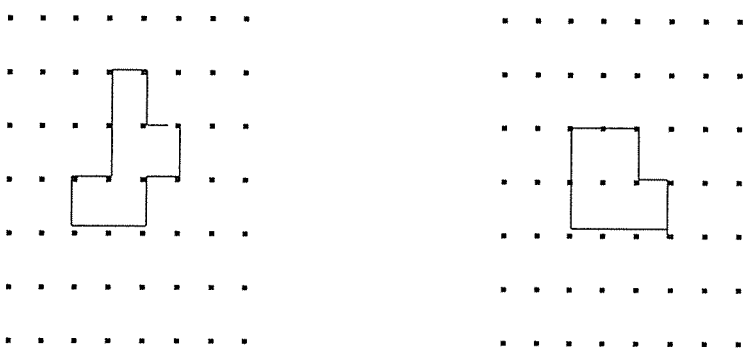
Q21)	Mango →$m x 3 = $3m Durian →$(m + 14) Total →$3m + $(m + 14) = $ (4m + 14)
Q22)	$74 - $20 = $54 $54 ÷ $6 = 9kg
Q23)	Circumference → ¼ x $\frac{22}{7}$ x $\frac{14}{1}$ = 11cm Circumference → ½ x $\frac{22}{7}$ x $\frac{7}{1}$ = 11 11 x 4 = 44 7 x 2 = 14 44 + 14 = 58
Q24)	$\frac{3}{5}$ + ¼ = $\frac{3}{5}$ = $\frac{3}{12}$ = $\frac{6}{17}$
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° ∠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