

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2019

PRIMARY 5

MATHEMATICS
PAPER 1

BOOKLET A

Name : _____

13 May 2019

Class : Primary 5 SY

		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.

The use of calculator is NOT allowed.

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). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

1. What is the place value of 5 in 1 586 924?

- (1) millions
- (2) thousands
- (3) ten thousands
- (4) hundred thousands

2. Round off 587 497 to the nearest thousand.

- (1) 580 000
- (2) 587 000
- (3) 588 000
- (4) 590 000

3. Express $1\frac{3}{5}$ as a decimal.

- (1) 1.3
- (2) 1.5
- (3) 1.6
- (4) 1.7

4. Which one of the following fractions is the smallest?

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

(2) $1\frac{1}{4}$

(3) $\frac{2}{3}$

(4) $\frac{7}{6}$

5. Find the value of $4\frac{3}{5} - 2\frac{2}{3}$.

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

(2) $1\frac{14}{15}$

(3) $2\frac{1}{2}$

(4) $2\frac{1}{15}$

6. Find the value of $\frac{5}{6} \times \frac{3}{4}$.

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

(2) $\frac{1}{5}$

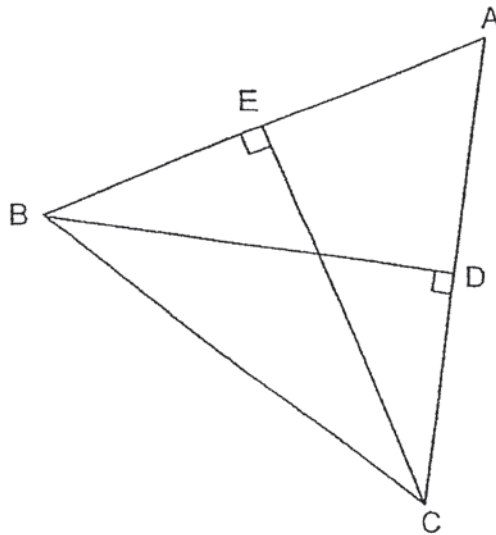
(3) $\frac{5}{8}$

(4) $\frac{4}{5}$

7. There are 42 children in a class. 26 are boys. Find the ratio of the number of girls to the total number of children.

- (1) 8 : 13
- (2) 8 : 21
- (3) 13 : 8
- (4) 13 : 21

8. Given the base is AB, which line is the height of the triangle?



- (1) AC
- (2) BC
- (3) BD
- (4) CE

9. $8 \text{ l } 2 \text{ ml} = \underline{\hspace{2cm}} \text{ ml}$

- (1) 82 ml
- (2) 8002 ml
- (3) 8020 ml
- (4) 8200 ml

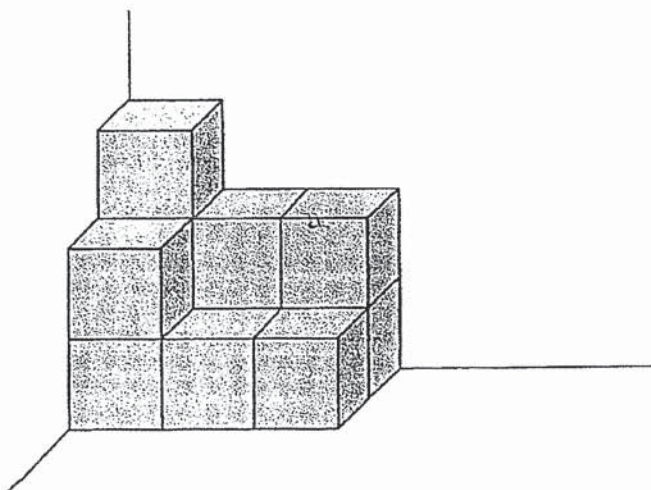
10. Find the value of $(27 + 3 \times 6) - (20 \div 2 - 5)$.

- (1) 30
- (2) 40
- (3) 75
- (4) 175

11. At a concert, $\frac{2}{5}$ of the children are boys and the rest are girls. How many children are there if there are 90 girls?

- (1) 30
- (2) 60
- (3) 90
- (4) 150

12. Find the number of cubes in the solid below.



- (1) 9
- (2) 10
- (3) 11
- (4) 12

13. A guitar costs \$75. A drum costs 10 times as much as the guitar. A piano costs 10 times as much as the drum. How much did Mr Singh pay if he bought a guitar and a piano?

- (1) \$825
- (2) \$7575
- (3) \$8250
- (4) \$8325

14. The ratio of the number of males to the number of females in an Art class is 2 : 3. 18 females decided to drop out of the Art class. The ratio of the number of males to the number of females became 4 : 3. How many male members are there in the Art class?

- (1) 12
- (2) 18
- (3) 24
- (4) 27

15. A repeated pattern is formed using the characters I, C, S and ♥.
The first 10 characters in the sequence are shown below.

I ♥ S C I ♥ S C I ♥

What is the 101th alphabet in this sequence?

- (1) I
- (2) C
- (3) S
- (4) ♥

End of Booklet A

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2019

PRIMARY 5

MATHEMATICS
PAPER 1

BOOKLET B

Name : _____

13 May 2019

Class : Primary 5

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.

The use of calculator is NOT allowed.

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. Write one million, one thousand and one in numerals.

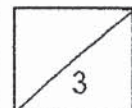
Ans: _____

17. Express $\frac{3}{7}$ as a decimal correct to 2 decimal places.

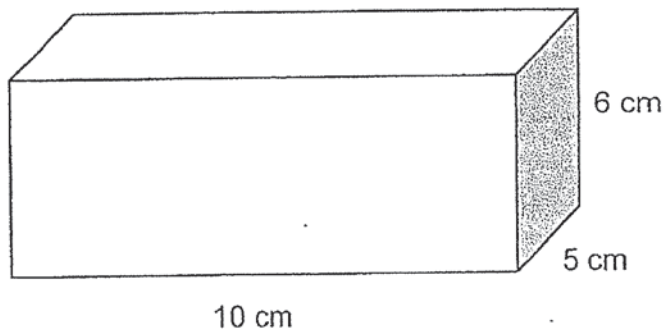
Ans: _____

18. 10 boys shared 4 l of fruit juice. How much fruit juice can each boy get?

Ans: _____ l



19. Find the volume of the cuboid below.

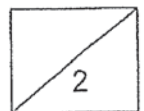


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Ans: _____ cm³

20. Express the ratio of 5 g to 1 kg in the simplest form.

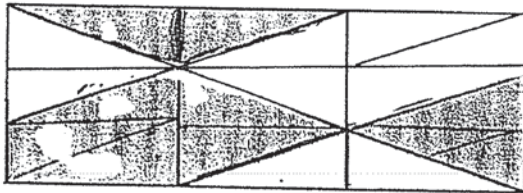
Ans: _____



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)

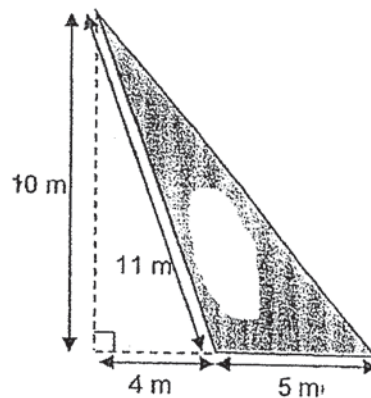
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21. The figure below consists of 3 identical rectangles.
What fraction of the figure is shaded?

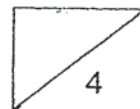


Ans: _____

22. What is the area of the shaded triangle below?



Ans: _____ m²



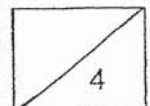
23. \$630 is shared between Alicia, Bella and Cassia in the ratio 2 : 1 : 4. How much more money did Cassia receive than Bella?

Do not write in
this column

Ans: \$ _____

-
24. A box weighed 31.04 kg when it had 9 identical balls in it. It weighed 35.2 kg when it had 11 identical balls in it. Find the mass of one identical ball.

Ans: _____ kg



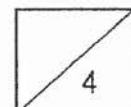
25. Jordan had \$280. He spent $\frac{1}{7}$ of it on a birthday gift to his friend and $\frac{1}{2}$ of the remainder on his enrichment fees. How much money did he have left?

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this column

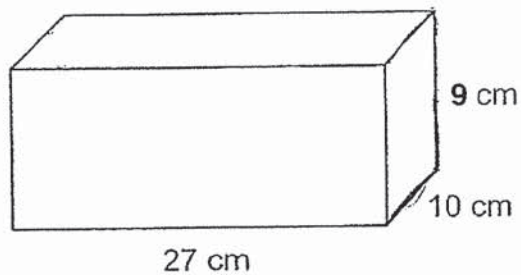
Ans: \$ _____

26. Prisha, Vicky and Aishah shared 105 pieces of chocolates. The chocolate that Prisha and Aishah had was in the ratio 1 : 2. The chocolate that Aishah and Vicky had was in the ratio 4 : 1. How many chocolates did Aishah have?

Ans: _____



27. How many 2 cm cubes can you fit into a tank measuring 27 cm by 10 cm by 9 cm?

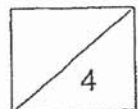


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Ans: _____

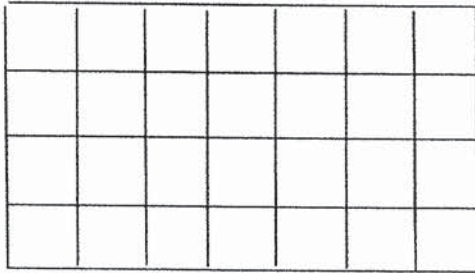
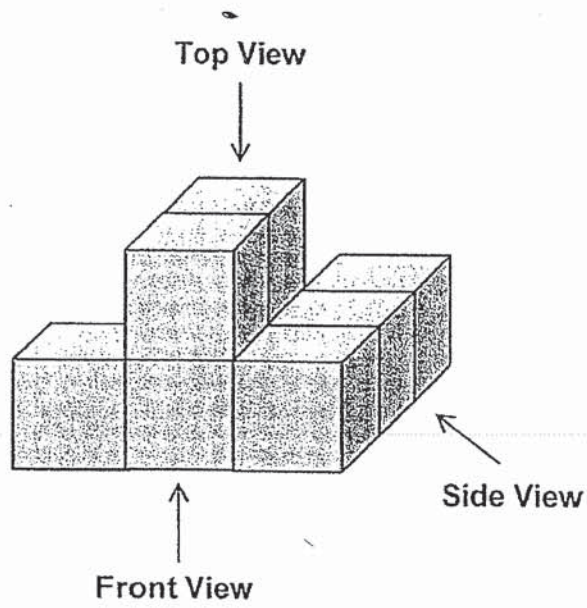
28. Peter and John had 110 oranges altogether. $\frac{3}{5}$ of Peter's oranges is equal to $\frac{1}{2}$ of John's oranges. How many oranges does Peter have?

Ans: _____

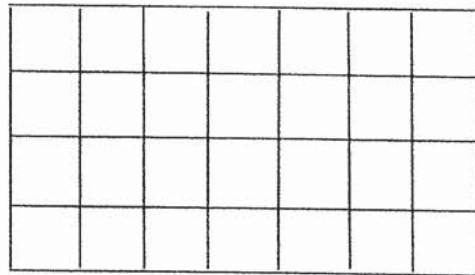


29. Draw the top and side view of the solid below.

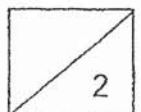
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Top View [1]



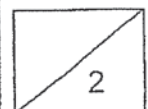
Side View [1]



30. Mrs Tan needed to sew a number of dolls for the SC carnival. She sewed 1 doll on the 1st day. She doubled the number she sewed every day. On the 4th day, she finished sewing the number of dolls required. How many dolls did she sew altogether?

Do not write in
this column

Ans: _____



End of Booklet B

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2019

PRIMARY 5

MATHEMATICS

PAPER 2

Name : _____

13 May 2019

Class : Primary 5 SV

	Mark	Max Mark
Paper 2		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.

The use of calculator is allowed.

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

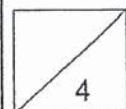
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1. Danielle had 240 coins. The ratio of the number of 10-cent coins to the number of 20-cent coins to the number of 50-cent coins was 2 : 5 : 1. What is the value of 10-cent coins Danielle had?

Ans: \$ _____

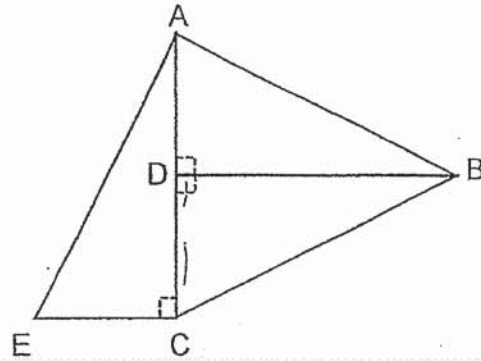
2. Cindy had some water. She used $\frac{8}{9}$ of it to water the plants and the remaining $\frac{1}{6}$ £ of the water for cooking. How much water did she have at first?

Ans: _ _____ £



3. The figure below is formed by 3 identical triangles. AC is 15 cm. Find the area of the figure.

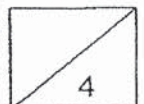
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Ans: _____ cm²

4. The ratio of Jun Xian's marbles to Wei Kang's marbles is 4 : 9 . Wei Kang had 36 marbles. How many marbles did Wei Kang have to give to Jun Xian so that both of them will have an equal number of marbles?

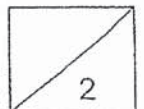
Ans: _____



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this column

5. At a bus interchange, some passengers boarded the bus. At the first bus stop, $\frac{2}{5}$ of the passengers alighted from the bus. At stop B, $\frac{3}{4}$ of the remaining passengers alighted from the bus. What fraction of original number of passengers was left on the bus?

Ans: _____

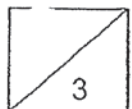


For questions 6 to 17, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [] at the end of each question or part-question. (50 marks)

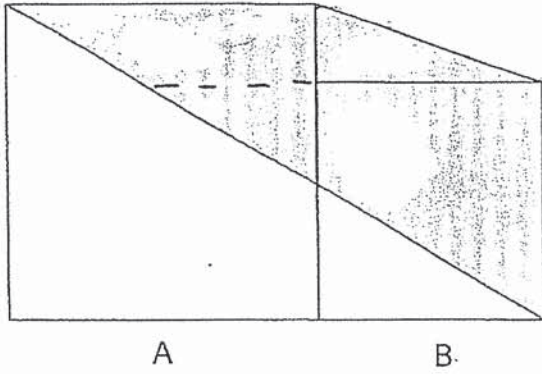
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6. Jonathan is 11 years old and his elder brother, Ivan, is 17 years old. How many years ago was Ivan three times as old as Jonathan?

Ans: _____ [3]

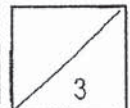


7. The area of Square A and Square B are 64 cm^2 and 36 cm^2 respectively.
Find the shaded area.



Do not write i
this column

Ans: _____ [3]



8. The cost of an ice cream is \$3.60. For every 5 ice cream bought, the 6th one would be free. A teacher wanted to buy an ice cream for each of his students. He paid a total of \$216. How many students did he have?

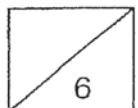
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Ans: _____ [3]

9. A jug has 1500 ml of water. A cup can hold 120 ml of water.
- a) What is the maximum number of cups that can be filled completely?
- b) How much water was left in the jug?

Ans: a) _____ [1]

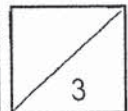
b) _____ [2]



10. Kenny had some money. He bought 8 cups of water and 2 cups of chocolate milk with $\frac{4}{5}$ of his money. The cost of a cup of chocolate milk is 6 times as much as a cup of water. How many more cups of water can he buy with his remaining money?

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this column

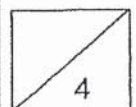
Ans: _____ [3]



11. A factory produced a total of 850 pink and blue hairclips. $\frac{1}{3}$ of the pink hairclips and 100 of the blue hairclips were sold. There was an equal number of pink and blue hairclips left in the end. Express the ratio of the number of pink hairclips to blue hairclips at first.

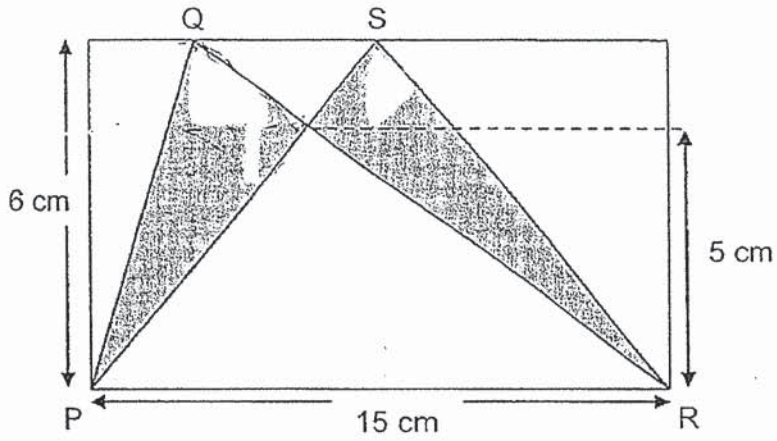
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this column

Ans: _____ [4]

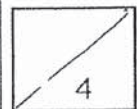


12. In the figure below, PQR and PSR are two overlapping triangles in a rectangle. Find the shaded area.

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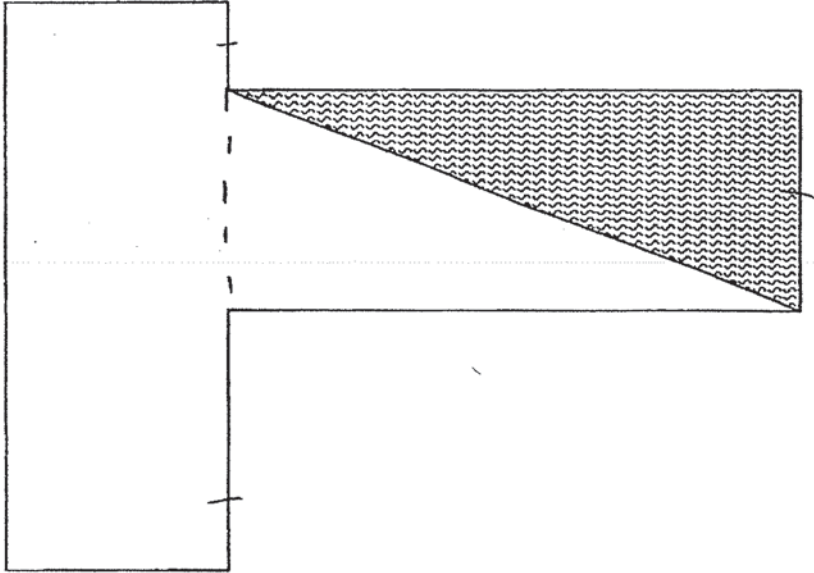


Ans: _____ [4]



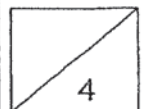
13. The garden below is made up of 2 identical rectangular plots of land each measuring 80 m by 30 m. There is a triangular pond in the garden.
- Find the perimeter of the garden.
 - Find the area of the garden not covered by the pond.

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this column



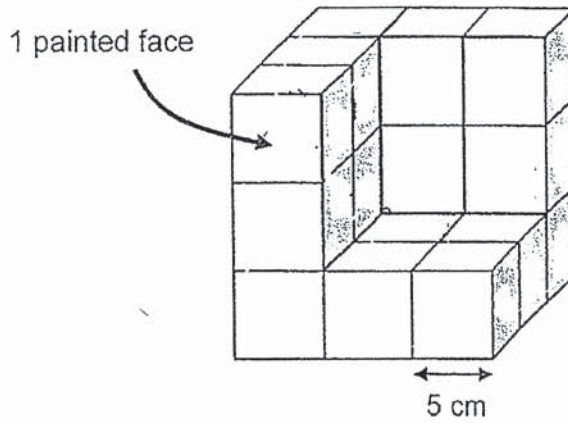
Ans: a) _____ [2]

b) _____ [2]



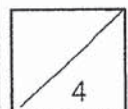
14. The figure below is made up of identical cubes.
 The side of each cube is 5 cm. The whole figure (including the base) is painted.
 (a) Find the number of painted faces.
 (b) Find the surface area of the figure that is painted.

Do not write i
 this column



Ans: (a) _____ [1]

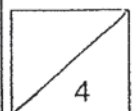
(b) _____ [3]



15. Mr Lee made a total of 100 porcelain bowls and plates. He sold them for \$862. Plates were sold at \$7.90 each while bowls were sold at \$8.90 each. How many bowls did Mr Lee make?

Do not write in
this column

Ans: _____ [4]



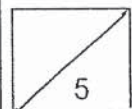
16. Adult and children admission tickets to a concert were sold over Saturday and Sunday. The same number of tickets were sold on both days. The ratio of the number of adult tickets sold to the number of children tickets sold on Saturday was 3 : 2. The ratio of the number of adult tickets sold to the number of children tickets sold on Sunday was 1 : 2. The total amount of children tickets sold on both days was 800.

- a) What fraction of the total number of tickets sold on both days are adult tickets?
- b) If an adult ticket cost \$8 and a child ticket cost \$4.50. Find the amount of money collected from the sale of tickets on both days.

Do not write in
this column

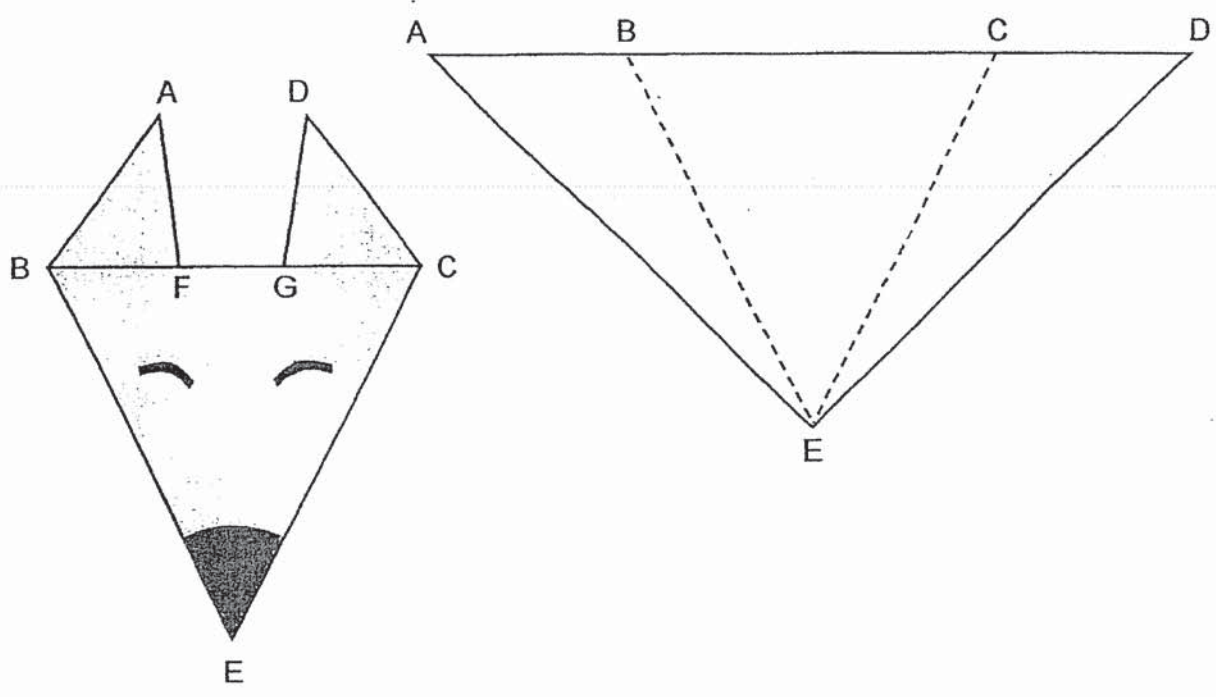
Ans: a) _____ [2]

b) _____ [3]



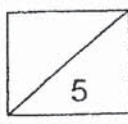
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17. Damien made a symmetrical origami fox using a right-angled triangular paper AED. $AE = ED = 14$ cm and $BE = CE$. The area of triangle BCE is 2 times that of triangle CDE. He then folded the 2 corners of the triangle to the back and formed the fox below. After folding, $\frac{3}{5}$ of triangle CDE was hidden.
- a) What is the ratio of the area of triangle DCG to the area of triangle BCE?
 b) Find the shaded area.



Ans: a) _____ [2]
 b) _____ [3]

End of Paper 2
 ~ Please check your work thoroughly. ~



ANSWER KEY

YEAR : 2019

LEVEL : PRIMARY 5

SCHOOL : SINGAPORE CHINESE GIRLS' SCHOOL PRI

SUBJECT : MATHEMATICS

TERM : SA 1

PAPER ONE

Q1	4	Q2	2	Q3	3	Q4	1	Q5	2
Q6	3	Q7	2	Q8	4	Q9	2	Q10	2
Q11	4	Q12	3	Q13	2	Q14	3	Q15	1

Q16) 1 001 001

Q17) 0.43

Q18) $\frac{4}{10}$

Q19) 300cm^3

Q20) 1)

Q21) $\frac{1}{2}$

Q22) $\frac{1}{2} \times 5 \times 10 = \underline{25\text{m}^2}$

Q23) $2 + 1 + 4 = 7$

$$7u \rightarrow 630$$

$$1u \rightarrow 630 \div 7 = 90$$

$$4 - 1 = 3$$

$$3u \rightarrow 90 \times 3 = \underline{\$270}$$

$$\text{Q24) } 11 - 9 = 2$$

$$2 \text{ balls} \rightarrow 35.2 - 31.04 = 4.16$$

$$1 \text{ ball} \rightarrow 4.16 \div 2 = \underline{2.08\text{kg}}$$

$$\text{Q25) } 6 \div 2 = 3$$

$$7u \rightarrow 280$$

$$1u \rightarrow 280 \div 7 = 40$$

$$3u \rightarrow 40 \times 3 = \underline{\$120}$$

$$\text{Q26) } P : A \quad A : V$$

$$1 : 2 \text{ (x2)} \quad 4 : 1$$

$$2 : 4$$

$$P \rightarrow 2u$$

$$A \rightarrow 4u$$

$$V \rightarrow 1u$$

$$2 + 4 + 1 = 7$$

$$7u \rightarrow .05$$

$$1u \rightarrow .05 \div 7 = 15$$

$$4u \rightarrow 15 \times 4 = \underline{60 \text{ chocolates}}$$

$$\text{Q27) } 27 \div 2 \approx 13$$

$$10 \div 2 = 5$$

$$9 \div 2 \approx 4$$

$$13 \times 5 \times 4 = \underline{260 \text{ cubes}}$$

Q28) 1u of J's oranges is 3u of Peter's

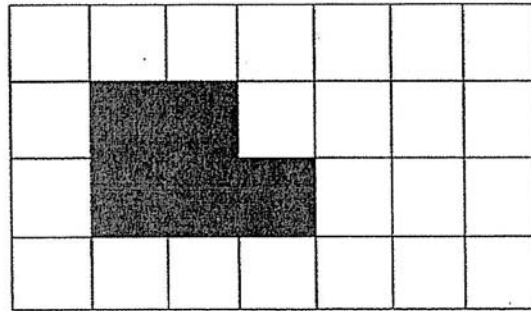
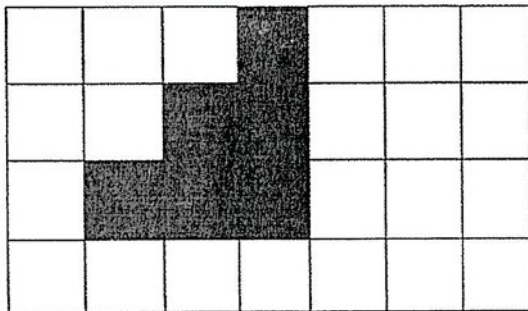
$$\text{Total no of u} \rightarrow (3 \times 2) + 5 = 11$$

$$11\text{u} \rightarrow 110$$

$$1\text{u} \rightarrow 110 \div 11 = 10$$

$$5\text{u} \rightarrow 10 \times 5 = \underline{50 \text{ oranges}}$$

Q29)



Q30) 1st day \rightarrow 1

$$2^{\text{nd}} \text{ day} \rightarrow 1 \times 2 = 2$$

$$3^{\text{rd}} \text{ day} \rightarrow 2 \times 2 = 4$$

$$4^{\text{th}} \text{ day} \rightarrow 4 \times 2 = 8$$

$$\text{Total} \rightarrow 1 + 2 + 4 + 8 = \underline{15 \text{ dolls}}$$

PAPER TWO

Q1) 10cent : 20cent : 50cent

$$2 : 5 : 1$$

$$\text{Total u} \rightarrow 2 + 5 + 1 = 8$$

$$8\text{u} \rightarrow 240$$

$$1\text{u} \rightarrow 240 \div 8 = 30$$

$$2\text{u} \rightarrow 30 \times 2 = 60$$

$$60 \times 0.10 = \underline{\$6}$$

Q2) $\frac{1}{9} \rightarrow \frac{1}{6}$ litres

$\frac{9}{9} \rightarrow 9 \times \frac{1}{6} = 1\frac{1}{2}$ litres

Ans: $1\frac{1}{2}$ litres

Q3) B base $\rightarrow 15 \div 2 = 7.5$

B height $\rightarrow 15\text{cm}$

B area $\rightarrow \frac{1}{2} \times 15 \times 7.5 = 56.25$

All are identical $\rightarrow 56.25 \times 3 = \underline{168.75\text{cm}^2}$

Q4) J : W

4 : 9

9u $\rightarrow 36$

13u $\rightarrow (36 \div 9) \times 13 = 52$

52 $\div 2 = 26$

36 - 26 = 10 marbles

Q5) 1u $\rightarrow 4$ parts

5u $\rightarrow 4 \times 5 = 20$ parts

1st stop $\rightarrow 4 \times 2 = 8$ parts

2nd stop $\rightarrow 9$ parts

1st and 2nd total $\rightarrow 8 + 9 = 17$ parts

Remaining $\rightarrow 20 - 17 = 3$

Fraction $\rightarrow \frac{3}{20}$

Ans: $\frac{3}{20}$ passengers left

Q6) Age difference $\rightarrow 17 - 11 = 6$

$2u \rightarrow 6$

$3u \rightarrow (6 \div 2) \times 3 = 9$

$17 - 9 = \underline{8 \text{ years ago}}$

Q7) Side of Sq A $\rightarrow \sqrt{64} = 8$

Side of Sq B $\rightarrow \sqrt{36} = 6$

Unshaded tri $\rightarrow \frac{1}{2} \times 14 \times 8 = 56$

$(64 + 36) - 56 + (\frac{1}{2} \times 6 \times 2) = \underline{50\text{cm}^2}$

Q8) 5 ice creams $\rightarrow 3.60 \times 5 = 18$

1 set $\rightarrow 5 \text{ ice creams} + 1 \text{ free } (\$18)$

$216 \div 18 = 12$

12 sets $\rightarrow 60 \text{ ice creams} + 12 \text{ free}$

$60 + 12 = \underline{72 \text{ students}}$

Q9a) $1500 \div 120 = \underline{12 \text{ cups}} \text{ (r5)}$

Q9b) $12 \times 120 = 1440$

$1500 - 1440 = \underline{60\text{ml}}$

Q10) $u + u = 12$

$12 + 8 = 20$

$4u \rightarrow 20$

$1u \rightarrow 20 \div 4 = \underline{5 \text{ cups of water}}$

Q11) $5u \rightarrow 850 - 100 = 750$

$1u \rightarrow 750 \div 5 = 150$

Blue at first $\rightarrow 150 + 150 + 100 = 400$

Pink at first $\rightarrow 150 \times 3 = 450$

$$450 : 400 (\div 5)$$
$$90 : 80 (\div 10)$$
$$9 : 8$$

Ans: 9 : 8

$$\text{Q12) } \Delta \text{PQR} \rightarrow \frac{1}{2} \times 15 \times 6 = 45$$

$$\text{Unshaded } \Delta \rightarrow \frac{1}{2} \times 15 \times 5 = 37.5$$

$$\text{Shaded area} \rightarrow 2 \times (45 - 37.5) = \underline{15\text{cm}^2}$$

$$\text{Q13a) Perimeter} \rightarrow (80 \times 4) + (30 \times 2) = \underline{380\text{m}}$$

$$\text{Q13b) Not covered} \rightarrow \frac{3}{4} \times 80 \times 30 \times 2 = \underline{3600\text{m}^2}$$

$$\text{Q14a) No of faces} \rightarrow 9 \times 6 = \underline{54}$$

$$\text{Q14b) Area of 1 painted face} \rightarrow 5 \times 5 = 25$$

$$\text{Total area} \rightarrow 25 \times 54 = \underline{1350\text{cm}^2}$$

Q15) Assume all are plates.

$$100 \times 7.90 = 790$$

$$\text{Total diff} \rightarrow 862 - 790 = 72$$

$$\text{Unit diff} \rightarrow 8.90 - 7.90 = 1$$

$$\text{No of bowls} \rightarrow 72 \times 1 = \underline{72 \text{ bowls}}$$

Q16a)	Saturday	Sunday
	A:C Total	A:C Total
	3:2 5	1:2 3
	9:6 15	5:10 15

Total adult u $\rightarrow 9 + 5 = 14u$

Total u $\rightarrow 15 + 15 = 30$

Fraction $\rightarrow \frac{14}{30}$

Ans: $\frac{14}{30}$

Q16b) Total children u $\rightarrow 6 + 10 = 16$

$16u \rightarrow 800$

$1u \rightarrow 800 \div 16 = 50$

$14u \rightarrow 50 \times 14 = 700$

Collected $\rightarrow (700 \times 8) + (800 \times 4.50) = \underline{\$9200}$

Q17a) DCG : CDE : BCE

2 : 5 : 10

DCG : BCE

2 : 10 = 1 : 5

Q17b) 1/4 of CDE $\rightarrow \frac{1}{4} \times \frac{1}{2} \times 14 \times 14 = 24\frac{1}{2}$

$\frac{2}{5}$ of CDE $\rightarrow \frac{2}{5} \times 24\frac{1}{2} = 9.8$

Shaded area $\rightarrow 49 + (9.8 \times 2) = \underline{68.6\text{cm}^2}$

END