



MARIS STELLA HIGH SCHOOL (PRIMARY)
SEMESTRAL ASSESSMENT 2
PRIMARY 5 MATHEMATICS
30 OCTOBER 2020
PAPER 1
(BOOKLET A)

15 questions

20 marks

Total time for Booklets A and B: 1 hour

NAME: _____ ()

CLASS: PRIMARY 5 _____

INSTRUCTIONS TO CANDIDATES

- 1. DO NOT OPEN THIS BOOKLET 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. 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. What is two million, two hundred and three thousand, four hundred and sixteen in numerals?

- (1) 2 023 416
- (2) 2 023 460
- (3) 2 203 416
- (4) 2 203 460

2. $\boxed{} \div 10 = 6.7$

- (1) 67
- (2) 670
- (3) 0.67
- (4) 0.067

3. A number when rounded to the nearest thousand is 30 000.
Which one of the following is most likely the number?

- (1) 29 099
- (2) 29 598
- (3) 30 597
- (4) 30 909

4. $104.25 = 100 + 4 + \frac{1}{5} + \frac{1}{\boxed{}}$

What is the missing number in the box?

- (1) 100
- (2) 25
- (3) 20
- (4) 4

5. Which one of the following is greater than $\frac{1}{5}$ but smaller than $\frac{1}{4}$?

(1) $\frac{2}{9}$

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

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

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

6. Which of the following is **not** a factor of 32?

(1) 16

(2) 9

(3) 8

(4) 4

7. The heights of four girls are given in the table below.

Name	Height
Cindy	$1\frac{1}{2}$ m
Edna	1 m 38 cm
Ruby	120 cm
Sally	$1\frac{3}{20}$ m

Who is the shortest?

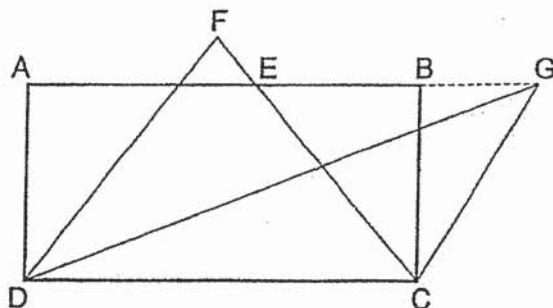
(1) Cindy

(2) Edna

(3) Ruby

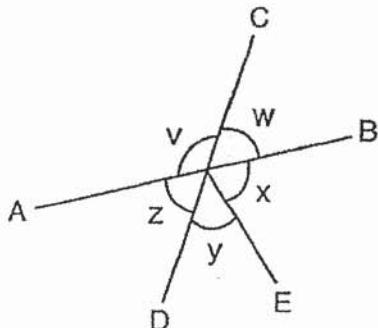
(4) Sally

8. The figure below shows a rectangle ABCD. Which one of the triangles below is half the area of rectangle ABCD?



- (1) Triangle ADG
 - (2) Triangle DFC
 - (3) Triangle ECG
 - (4) Triangle GDC

9. In the figure below, AB and CD are straight lines. Which one of the statements below is correct?

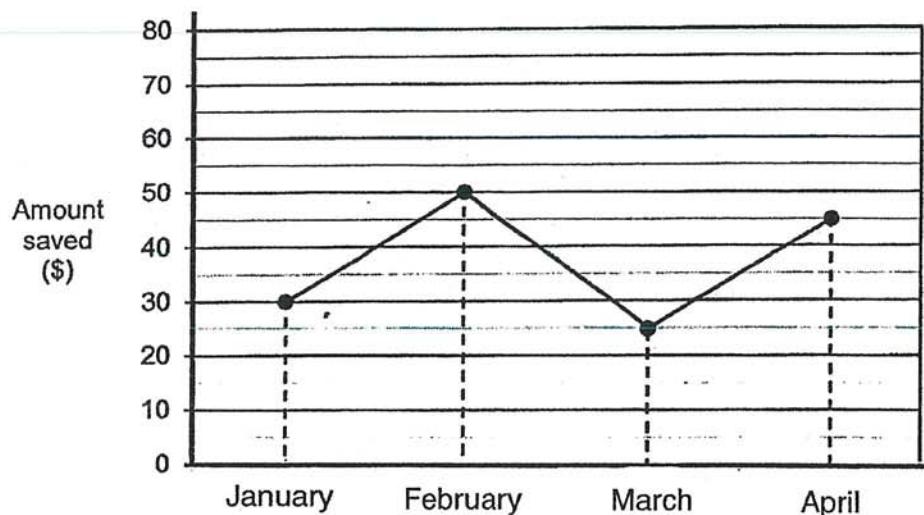


- (1) $\angle v = \angle y$
 (2) $\angle x = \angle z$,
 (3) $\angle x + \angle y = \angle v$
 (4) $\angle x + \angle w = \angle y$

10. Amei has twice as many stamps as Ben. Cindy has 3 times as many stamps as Ben. They have 42 stamps altogether. How many stamps does Ben have?

- (1) 6
(2) 7
(3) 12
(4) 14

11. Zack received \$80 for pocket money each month. The line graph shows the amount of money he saved from January to April.



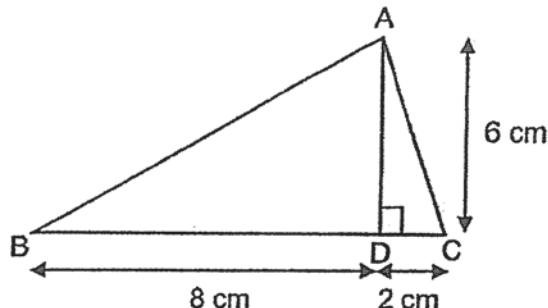
In which month did Zack spend the most?

- (1) January
- (2) February
- (3) March
- (4) April

12. Mrs Lim had $\frac{8}{9}$ kg of flour at first. She used $\frac{1}{4}$ of the flour for baking and $\frac{1}{6}$ kg of the flour for cooking. How much flour had she left?

- (1) $\frac{1}{2}$ kg
- (2) $\frac{5}{12}$ kg
- (3) $\frac{14}{27}$ kg
- (4) $\frac{17}{36}$ kg

13. What is the area of triangle ABC below?



- (1) 24 cm^2
 - (2) 30 cm^2
 - (3) 48 cm^2
 - (4) 60 cm^2
14. Jamie had \$42 and Sally had \$90. After they shared the cost of a present for a friend equally, the amount of money Sally had left was 3 times the amount of money Jamie had left. How much did each of them pay for the present?
- (1) \$16
 - (2) \$18
 - (3) \$24
 - (4) \$26
15. Michael cuts a 3-metre long rope into three pieces. The length of ropes X and Y are in the ratio 5 : 3. Rope X is 50 cm longer than rope Y. How long is Rope Z?
- (1) 75 cm
 - (2) 100 cm
 - (3) 125 cm
 - (4) 200 cm

End of Booklet A
Go on to Booklet B



MARIS STELLA HIGH SCHOOL (PRIMARY)
SEMESTRAL ASSESSMENT 2
PRIMARY 5 MATHEMATICS
30 OCTOBER 2020
PAPER 1
(BOOKLET B)

15 questions

25 marks

Total time for Booklets A and B: 1 hour

NAME: _____ ()

CLASS: PRIMARY 5 _____

INSTRUCTIONS TO CANDIDATES

1. **DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**
2. **FOLLOW ALL INSTRUCTIONS CAREFULLY.**
3. **ANSWER ALL QUESTIONS.**
4. **WRITE YOUR ANSWERS IN THIS BOOKLET.**
5. **YOU ARE NOT ALLOWED TO USE A CALCULATOR.**

MARKS OBTAINED FOR

PAPER 1 (BOOKLET A)	/ 20	Parent's Signature: _____
PAPER 1 (BOOKLET B)	/ 25	
TOTAL	/ 45	Date: _____

Questions 16 to 20 carry 1 mark 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 (5 marks)

Do not write in this space.

16. What is the value of $90 - 7 \times 3 + 14 \div 2$?

Answer: _____

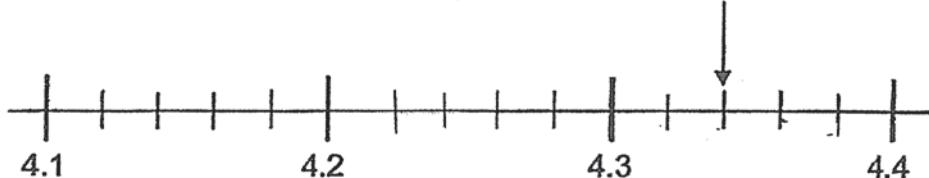
17. What is the first common multiple of 6 and 9?

Answer: _____

18. Find the value of 28×4000 .

Answer: _____

19. Find the missing decimal indicated by the arrow.



Answer: _____

20. A worker is paid \$12 for an hour. How much is he paid for $5\frac{1}{2}$ hours?

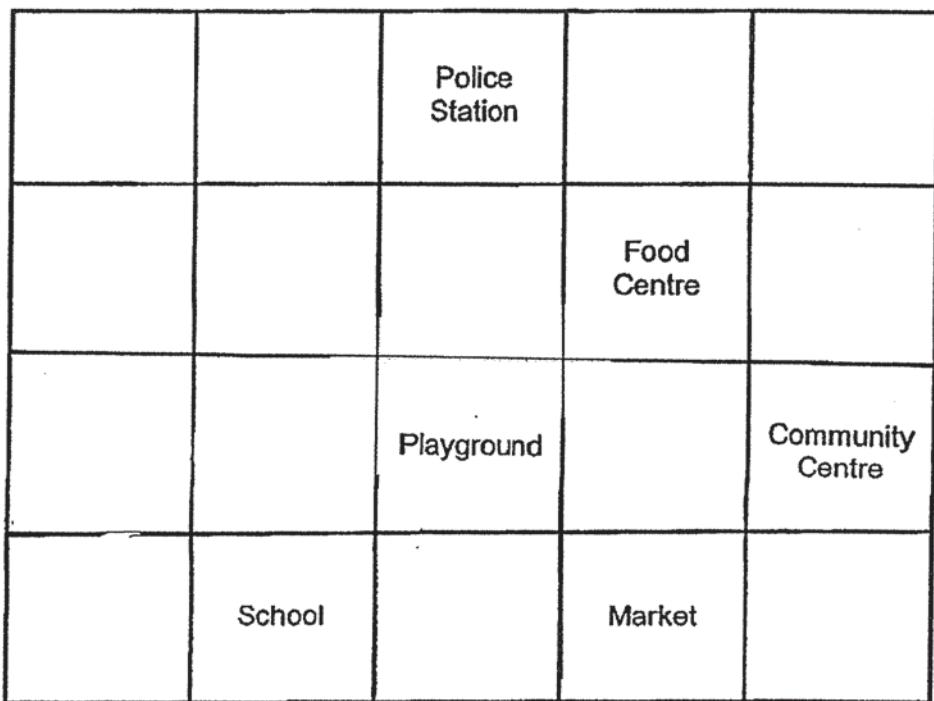
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Answer: \$ _____

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)

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21. The square grid below shows the plan of a neighbourhood. The police station is north of the playground.



- (a) Xiao Hao is standing at the playground, facing west. If he turns 135° clockwise, where will he be facing?

Answer: _____

- (b) The town council wants to build a library in the neighbourhood. The location of the library will be south-west of the police station and west of the playground. In the square grid above, put an "X" in the correct square to indicate where the library will be built.

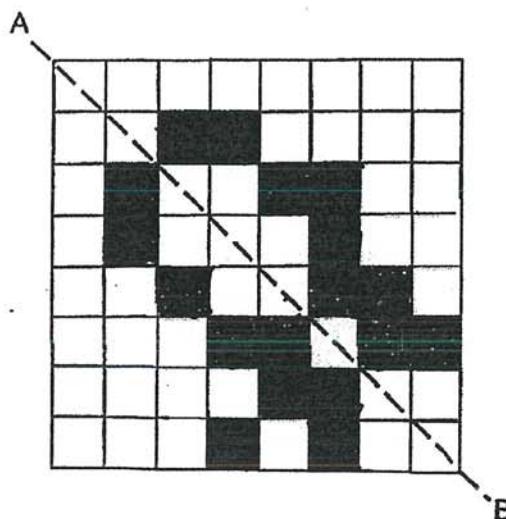
22. There are 850 people at a concert. 30% of them are adults and the rest are children. How many children are at the concert?

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this
space.

23. Sally had \$13.50. She bought 6 mangoes and had \$4.50 left. How much did she pay for each mango?

Answer: \$ _____

24. Shade 2 more squares to make the figure below symmetric, with AB as the line of symmetry.



25. The table shows the charges for overdue books borrowed from a library.

Overdue Book charges	
For the first 4 days	10 cents per day
From the 5 th day onwards	25 cents per day

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space.

Jonathan's book was overdue for 9 days. How much was he charged for returning the book late?

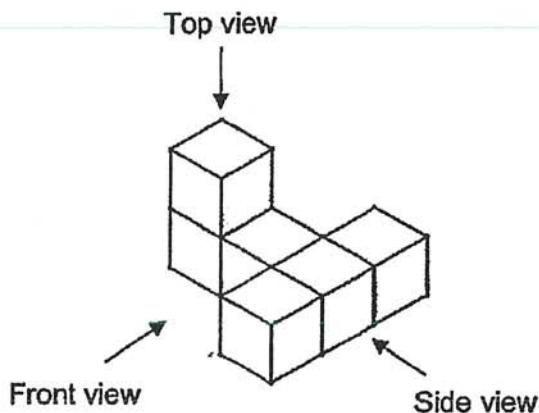
Answer: \$ _____

26. The average mass of Jimmy, Leonard and Matthew is 48 kg. Jimmy is 7 kg heavier than Leonard and 5 kg heavier than Matthew. What is Leonard's mass?

Answer: _____ kg

27. The solid is formed with 6 unit cubes. Draw the front and top views of the solid in the isometric paper provided below.

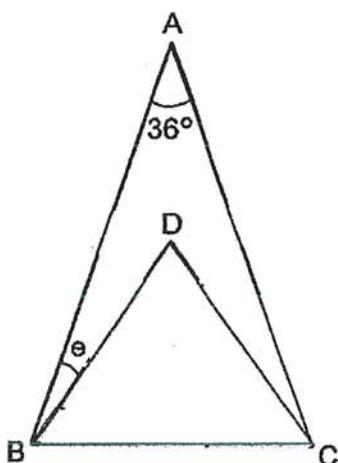
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Front View

A top-down view of a 5x5 grid of points, representing a 5x5 matrix. The grid is composed of 25 small black dots arranged in a perfect square pattern.

28. In the figure below, ABC is an isosceles triangle, BDC is an equilateral triangle and $\angle BAC = 36^\circ$. Find $\angle e$.



Answer: _____

29. Mdm See baked an equal number of chocolate tarts and strawberry tarts. She gave away 18 chocolate tarts and 60 strawberry tarts. After that, she had 3 times as many chocolate tarts as strawberry tarts. How many strawberry tarts had she left?

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write in
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space.

Answer: _____

30. Peter read the same number of pages of his storybook each day. At the end of the 7th day, he was left with $\frac{1}{4}$ of the total number of pages. After another 2 days, he was left with 10 pages. How many pages are there in Peter's storybook?

Answer: _____

End of Booklet B





MARIS STELLA HIGH SCHOOL (PRIMARY)
SEMESTRAL ASSESSMENT 2
PRIMARY 5 MATHEMATICS
30 OCTOBER 2020
PAPER 2

17 questions

55 marks

Time: 1 h 30 min

NAME: _____ ()

CLASS: PRIMARY 5 _____

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4. SHOW YOUR WORKINGS CLEARLY AS MARKS ARE AWARDED FOR CORRECT WORKING.
5. WRITE YOUR ANSWERS IN THIS BOOKLET.
6. YOU ARE ALLOWED TO USE A CALCULATOR.

MARKS OBTAINED FOR

PAPER 1 (BOOKLET A & B)	/ 45	Parent's Signature: _____
PAPER 2	/ 55	
TOTAL	/ 100	Date: _____

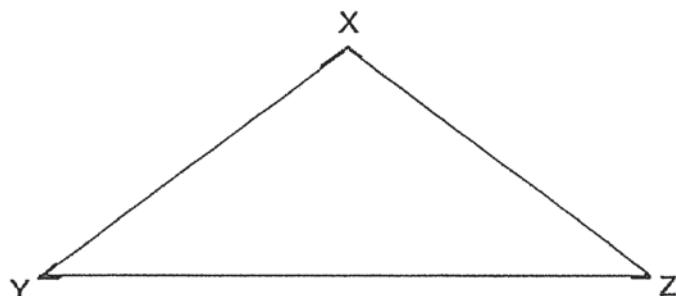
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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1. Pauline prepared some juice in a big container. She poured some of the juice into 7 bottles. Each bottle contained $1\frac{2}{9}$ l of juice. After that, $1\frac{3}{4}$ l of juice was left in the container. How much juice did Pauline prepare?

Answer: _____ l

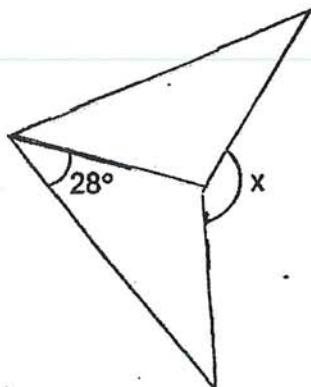
2. In the figure, XYZ is an isosceles triangle. The ratio of the length of XY to the length of YZ is 5 : 8. The perimeter of triangle XYZ is 522 cm. Find the length of XY.



Answer: _____ cm

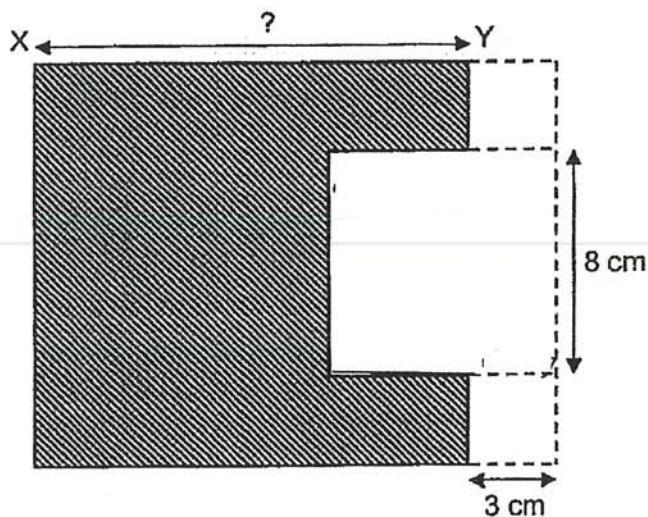
3. Two identical isosceles triangles are arranged as shown in the figure. Find $\angle x$.

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Answer: _____ $^{\circ}$

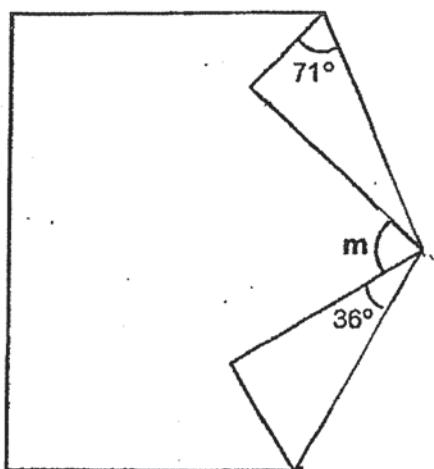
4. Wei Ming had a piece of rectangular cardboard. He cut out a square of side 8 cm and two identical squares of side 3 cm from it. The remaining cardboard, which is shaded, has a perimeter of 68 cm. What is the length of XY?



Answer: _____ cm

5. The figure below shows a piece of rectangular paper with two of its corners folded down. Find $\angle m$.

Do not
write in
this
space.



Answer: _____ $^\circ$

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

Do not write in this space.

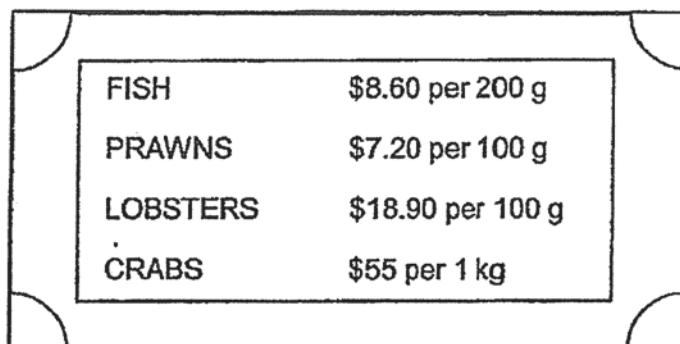
6. Tasty Cake Shop baked 3404 pies. The pies were packed into 80 large boxes of 25 pies each and the rest into small boxes of 12 pies each. How many small boxes of 12 pies were there?

Answer: _____ [3]

7. $\frac{3}{4}$ of Donnie's savings is equal to $\frac{2}{3}$ of Evan's savings. Donnie and Evan save \$408 altogether. How much is Donnie's savings?

Answer: _____ [3]

8. The menu of a seafood restaurant is shown below.



FISH	\$8.60 per 200 g
PRAWNS	\$7.20 per 100 g
LOBSTERS	\$18.90 per 100 g
CRABS	\$55 per 1 kg

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Mr Toh took his family to the restaurant for dinner. He ordered 1 kg of fish, 600 g of prawns and 1.6 kg of crabs. How much did he pay altogether for the seafood?

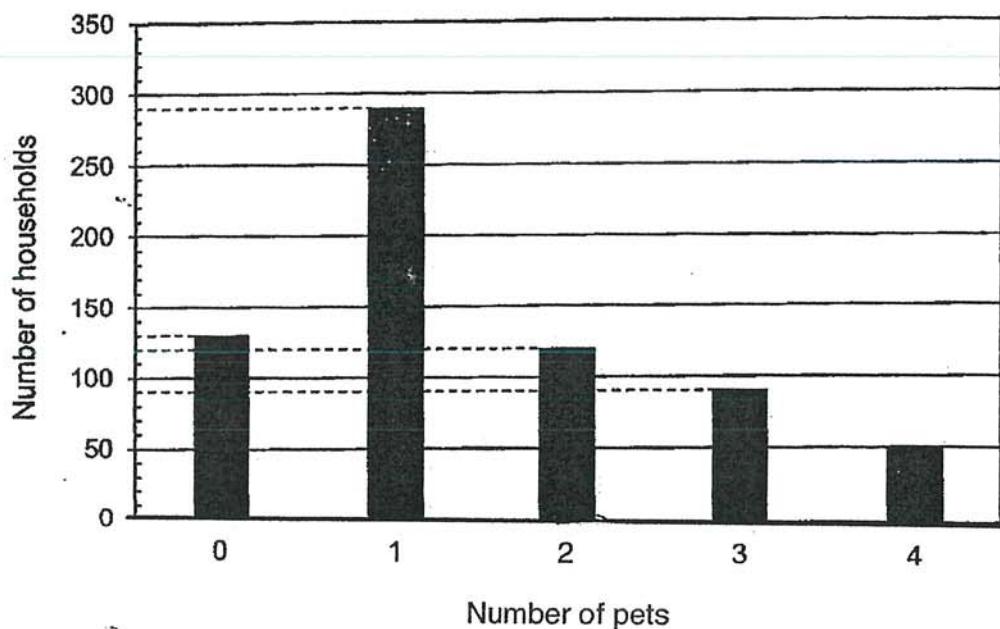
Answer: _____ [3]

9. The average age of Andrew's nephews is 10 years old. When Andrew joins them, the average age of Andrew and his nephews becomes 14 years old. Given Andrew is 30 years old, how many nephews does he have?

Answer: _____ [3]

10. The graph below shows the number of pets each of the 680 households has.

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space.



- (a) How many households have at least 3 pets each?

Answer: _____ [1]

- (b) $\frac{3}{17}$ of the total households have _____ pets each.

Answer: _____ [2]

11. The table below shows the postage rate for parcels sent overseas.

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Destination Group	Postage Rate	
	First 2 kg	Every additional 500 g
Group A Thailand, Indonesia, Malaysia	\$12	\$5
Group B Hong Kong, Korea, Taiwan	\$18	\$7

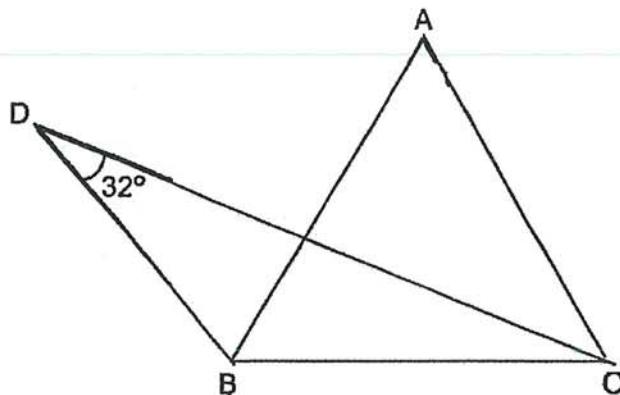
Mr Wang sent a parcel of mass 6 kg to Indonesia and another parcel of mass 1.8 kg to Taiwan.

How much did he pay for the postage in total?

Answer: _____ [3]

12. The figure below is not drawn to scale. ABC is an equilateral triangle, DEC is a straight line and $\angle BDC$ is 32° .

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space.



- (a) 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. [3]

Statement	True	False	Not possible to tell
(i) $\angle ACE$ is smaller than 60° .			
(ii) $\angle AEC$ is 74° .			
(iii) The sum of $\angle DBC$ and $\angle DEB$ is 208° .			

- (b) In the statement below, circle the words that describe triangle DBC correctly.

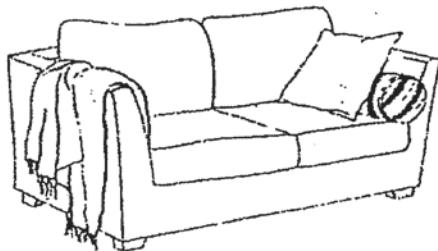
Triangle DBC (is / is not) an isosceles triangle because lines DB and BC (are / are not) equal.

[1]

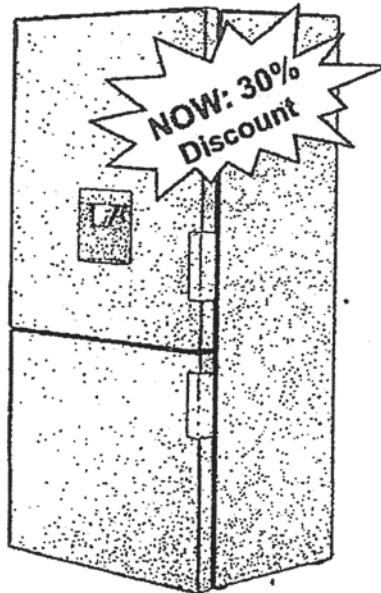
13. Mdm Lily was attracted to the advertisement put up by Cozy Furniture Store. The usual price of a refrigerator, before GST, is \$4200. It is 3 times the usual price of a sofa set.

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space.

COZY FURNITURE STORE



Sofa set



Refrigerator

Mdm Lily bought a sofa set and a refrigerator. She was given a 30% discount on the refrigerator only.

- (a) How much did she pay for the sofa set before GST?
(b) How much did she pay for the refrigerator after the 7% GST?

Answer: (a) _____ [1]

(b) _____ [3]

14. A sum of money was shared among three brothers Ahmad, Fandy and Halim in the ratio $3 : 2 : 1$ respectively. After Ahmad gave \$24 to Fandy and \$12 to Halim, the ratio of their shares became $2 : 2 : 1$.

Do not
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this
space.

- (a) How many percent of this sum of money was Halim's share in the end?
(b) How much was Ahmad's share at first?

Answer: (a) _____ [1]

(b) _____ [3]

15. Samantha spent $\frac{1}{5}$ of her salary on transport. She spent $\frac{5}{12}$ of her remaining salary and another \$56 of her salary on groceries. She then saved the rest of her salary.
- (a) Samantha spent \$451 on groceries. How much was her salary?
- (b) How much did Samantha save?

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space.

Answer: (a) _____ [3]

(b) _____ [2]

16. Tables and chairs in a restaurant are arranged as shown in the diagram below.

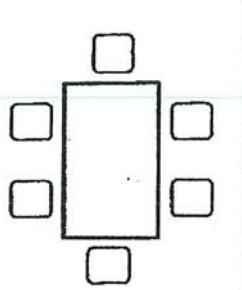


Figure 1

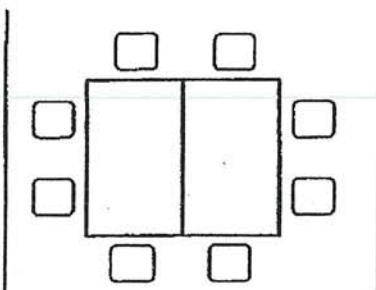


Figure 2

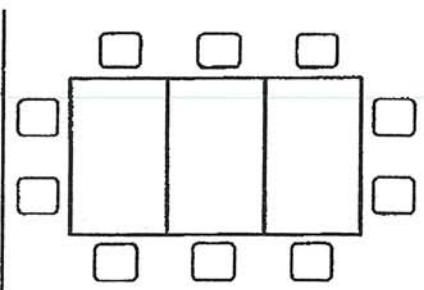
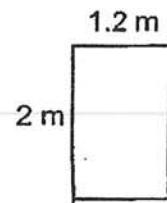


Figure 3

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Figure Number	Number of Tables used	Number of Chairs used
1	1	6
2	2	8
3	3	10
4	4	(a) _____

- (a) Complete the table above with the correct answer. [1]
- (b) Which figure used 54 chairs?
- (c) Each table measures 2 m by 1.2 m. What is the perimeter of the row of tables used in Figure 12?

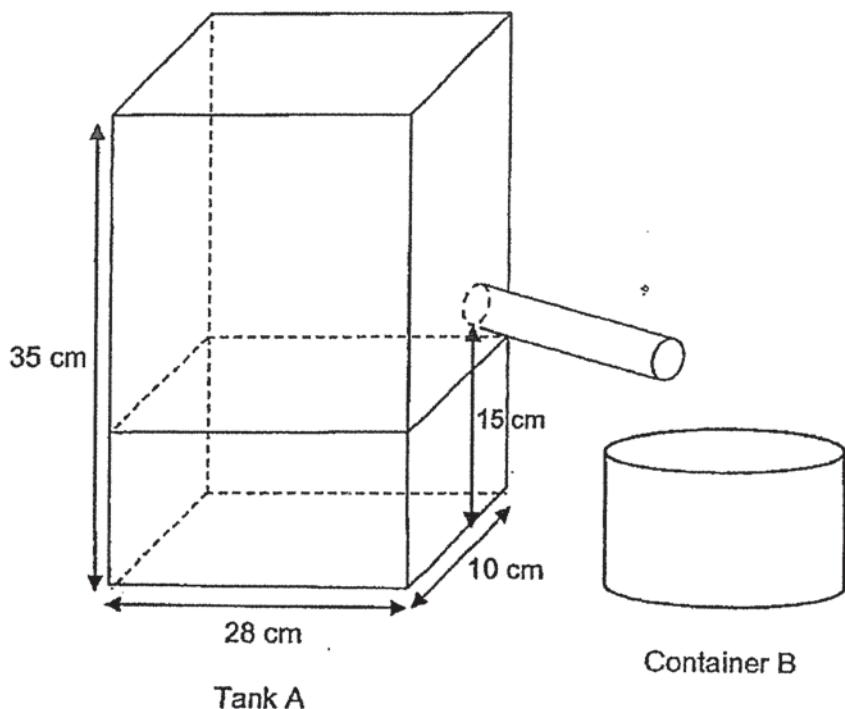


Answer: (b) _____ [2]

(c) _____ [2]

17. Tank A measuring 28 cm by 10 cm by 35 cm was $\frac{2}{5}$ filled with water at first.

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space.



When 6 cups, each containing 250 cm^3 of water, were poured into Tank A, some water overflowed into Container B. How many litres of water would be collected in Container B?

Answer: _____ [5]

End of Paper 2

ANSWER KEY

YEAR : 2020
LEVEL : PRIMARY 5
SCHOOL : MARIS STELLA
SUBJECT : MATHEMATICS
TERM : SA2

BOOKLET A

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

BOOKLET B

Q16. $90 - 7 \times 3 + 14 \div 2$
 $= 90 - 7 \times 3 + 7$
 $= 90 - 21 + 7 = 69 + 7 = 76$

Q17. 18

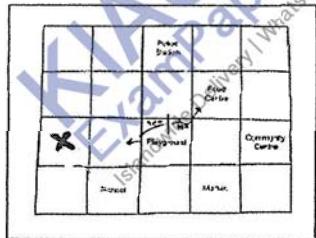
Q18. $28 \times 4 \times 1000$
 $= 112 \times 1000 = 112000$

Q19. 4.34

Q20. $\$12 \times 5 + \6
 $= \$60 + \$6 = \$66$

Q21 a). Food Centre

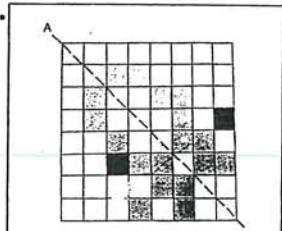
b)



Q22. $\frac{70}{100} \times \frac{850}{1} = 595$

Q23. $6M = \$13.50 - \$4.50 = \$9$
 $1M = \$9 + 6 = \1.50

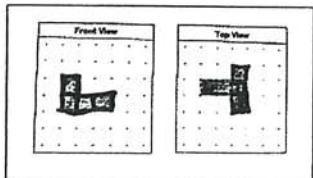
Q24.



$$\begin{aligned} \text{Q25. Total} &= (\$0.10 \times 4) + (\$0.25 \times 5) \\ &= \$0.40 + \$1.25 \\ &= \$1.65 \end{aligned}$$

$$\begin{aligned} \text{Q26. } 144 - 7 - 2 &= 135 \\ 135 \div 3 &= 45 \text{ kg} \end{aligned}$$

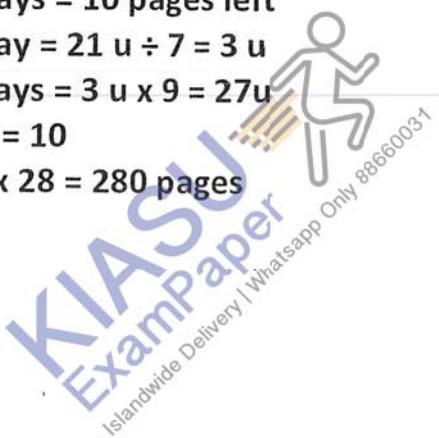
Q27.



$$\begin{aligned} \text{Q28. } \frac{180^\circ - 36^\circ}{2} &= 72^\circ \\ <e &= 72^\circ - 60^\circ = 12^\circ \end{aligned}$$

$$\begin{aligned} \text{Q29. } 2u &= 60 - 18 = 42 \\ 1u &= 42 \div 2 = 21 \end{aligned}$$

$$\begin{aligned} \text{Q30. } 7 \text{ days} &= 21 \text{ u read} \\ 9 \text{ days} &= 10 \text{ pages left} \\ 1 \text{ day} &= 21 \text{ u} \div 7 = 3 \text{ u} \\ 9 \text{ days} &= 3 \text{ u} \times 9 = 27 \text{ u} \\ 1 \text{ u} &= 10 \\ 10 \times 28 &= 280 \text{ pages} \end{aligned}$$



PAPER 2

Q1. $7B = 1\frac{2}{9}L \times 7 = 8\frac{5}{9}L$

$$\text{Total} = 8\frac{5}{9} + 1\frac{3}{4} = \frac{77}{9} + \frac{7}{4}$$

$$= \frac{308}{36} + \frac{63}{36} = \frac{371}{36}$$

$$= 10\frac{11}{36}L$$

Q2. $1u = 522\text{cm} \div 18 = 29\text{cm}$

$$XY = 29\text{cm} \times 5 = 145\text{cm}$$

Q3. $180^\circ - 28^\circ \times 2 = 124^\circ$

$$\angle x = 360^\circ - 124^\circ - 124^\circ = 112^\circ$$

Q4. $ZXY = 68\text{cm} - 14\text{cm} - (3\text{cm} \times 2) - (5\text{cm} \times 2) - 8\text{cm} = 30\text{cm}$

$$XY = 30\text{cm} \div 2 = 15\text{cm}$$

Q5. $\angle Y = 90^\circ - 71^\circ = 19^\circ$

$$\angle m = 180^\circ - 36^\circ \times 2 - 19^\circ \times 2 = 70^\circ$$

Q6. First $80 = 80 \times 25 = 2000$

$$\text{Left small} = 3404 - 2000 = 1404$$

$$\text{Sets} = 1404 \div 12 = 117$$

Q7. $\frac{3}{4} = \frac{2}{3}$

$$= \frac{6}{8} = \frac{6}{9}$$

$17u = \$408$

$$1u = \$408 \div 17 = \$24$$

$$D = \$24 \times 8 = \$192$$

Q8. $F = \$8.60 \times 5 = \43

$$P = \$7.20 \times 6 = \$43.20$$

$$0.2\text{kg} = \$55 \div 5 = \$11$$

$$C = \$55 + \$11 \times 3 = \$88$$

$$\text{Total} = \$88 + \$43.20 + \$43 = \$174.20$$

Q9.

No Nephew	2	3	4
Total before	20	30	40
Total after	42	56	70
Check	X	X	✓
Diff	12	26	30

ANS: 4

Q10 a) $90 + 50 = 140$

b) $\frac{3}{17} = \frac{120}{680}$ ANS = 2

Q11. Indonesia set first 2 = $6\text{kg} - 2\text{kg} \div 500\text{g}$

$= 6000 - 2000 \div 500 = \frac{4000}{500} = \frac{8}{1} = 8$

Indonesia = $\$12 + \$5 \times 8 = \$52$

Taiwan = $\$18$

Total = $\$52 + \$18 = \$70$

Q12 a) i. True

ii. Not Possible To Tell

iii. True

b) Triangle DBC is NOT an isosceles triangle because lines DB and BC are NOT equal.

Q13 a) $SS = \$4200 \div 3 = \1400

b) Discount = $\frac{70}{100} \times \$4200 = \2940

GST = $\frac{107}{100} \times \frac{\$2940}{1} = \$3145.80$

Q14 a) $\frac{1}{5} = \frac{20}{100} \% = 20\%$

b) $3u = 2u + 12 = 36$

$1u = 36 \div 3 = 12$

$15 \times 12 = \$180$

Q15 a) $5u = \$451 - 56 = \395

$1u = \$395 \div 5 = \79

$\frac{12}{12} = \$79 \times 12 = \948

$15u = \$948 + \$79 \times 3 = \$1185$

b) $T = 79 \times 3 = 237$

$\$1185 - \$237 - \$451 = \497

Q16 a) 12

b)

C	T	Fig	Check
14	5	5	X
16	6	6	X
24	10	10	X
44	20	20	X
54	25	25	✓

b) ANS = 25

c) $12T = (2m \times 2) + (1.2m \times 24)$

$= 4m + 28.8m = 32.8m$

Q17. VOL NOW = $\frac{2}{5} \times 28\text{cm} \times 10 \times 35 = 3920\text{cm}^3$

Height till over flow = $28 \times 10 \times 15 = 4200\text{cm}^3$

Vol of cups = $250\text{cm}^3 \times 6 = 1500\text{cm}^3$

Vol when cup added = $3920\text{cm}^3 + 1500\text{cm}^3 = 5420\text{cm}^3$

Collected = $5420\text{cm}^3 - 4200\text{cm}^3 = 1220\text{cm}^3 = 1.22\text{L}$

5
210.