PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)

END-OF-YEAR EXAMINATION, 2024

PRIMARY FIVE

MATHEMATICS
PAPER 1
(BOOKLET A)

NAME : _____ ( )

CLASS : P 5 _____

DATE : 24 October 2024

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all the 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.

	Marks Obtained / Maximum Marks
PAPER 1(Booklet A)	/ 20
PAPER 1(Booklet B)	/ 25
PAPER 2	/ 55
TOTAL	/ 100

Parent's Signature: _____

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 twenty-five thousand and forty in numerals?

   (1) 2540

   (2) 25 040

   (3) 25 400

   (4) 250 040

2. Which of the following is a common multiple of 4 and 6?

   (1) 10

   (2) 12

   (3) 16

   (4) 18

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

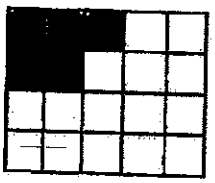
   (1) 1.1

   (2) 1.14

   (3) 1.20

   (4) 1.25

4. The figure is divided into 20 equal parts.
What percentage of the figure is shaded ?



(1) 25%

(2) 20%

(3) 5%

(4) 4%

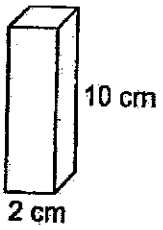
5. A solid cuboid of height 10 cm has a square base of side 2 cm.
What is its volume?

(1) 20 cm^3

(2) 40 cm^3

(3) 120 cm^3

(4) 200 cm^3



6. A printer takes 2 min to print 3 posters.
At the same rate, how long will it take to print 27 posters?

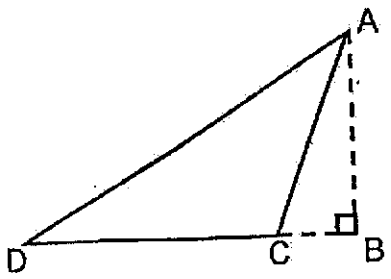
(1) 6 min

(2) 9 min

(3) 16 min

(4) 18 min

7. For triangle ACD below, name the base that is related to height AB.



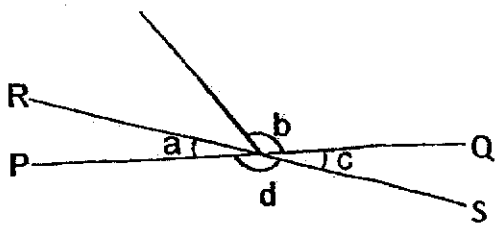
(1) AC

(2) CD

(3) DA

(4) DB

8. In the figure, PQ and RS are straight lines.
Which two angles are equal?



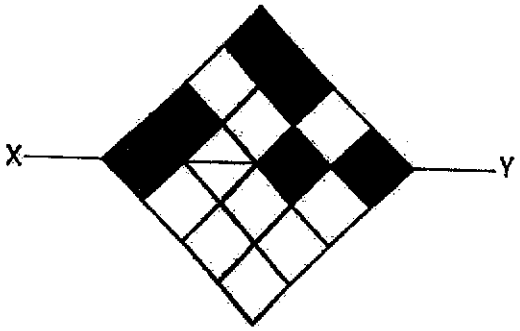
(1) ∠a and ∠c

(2) ∠a and ∠d

(3) ∠b and ∠c

(4) ∠b and ∠d

9. The figure below shows 16 squares. What is the least number of squares that must be shaded so that the line **XY** becomes a line of symmetry?



(1) 5

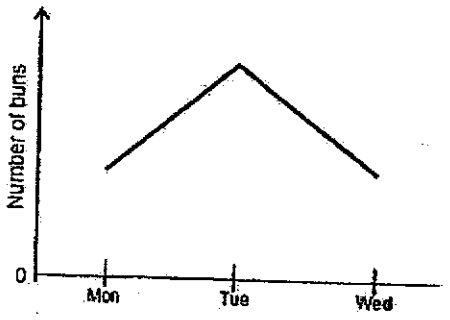
(2) 2

(3) 3

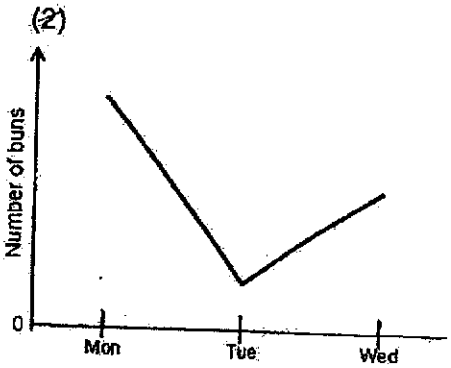
(4) 4

10. The graph below shows the **number** of buns sold by a shop from Monday to Wednesday. The number of **buns** sold by the shop increased by 40 from Monday to Tuesday and decreased by 20 from Tuesday to Wednesday. Which graph shows the number **of buns** sold from Monday to Wednesday?

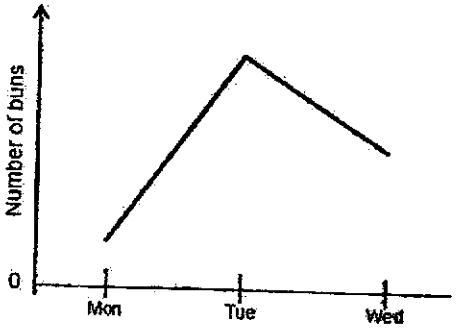
(1)



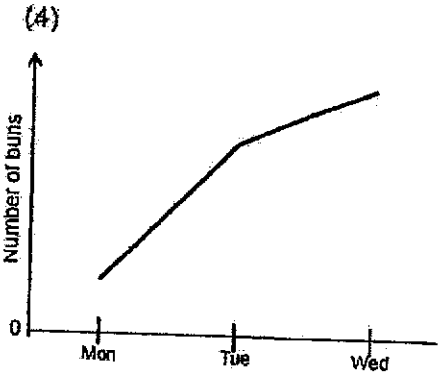
(2)



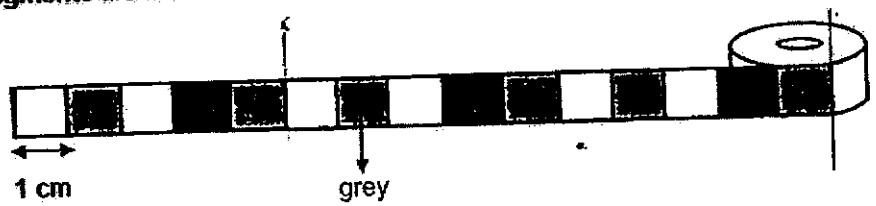
(3)



(4)



11. A roll of tape is made up of white, grey and black segments. Each segment is 1 cm long. The segments follow a repeated pattern as shown below.
A piece of tape 60 cm long is cut from the roll. In that piece, how many grey segments are there ?



(1) 12

(2) 15

(3) 20

(4) 24

12. During a sale, a dress was sold at a discount of 20%.
What was the price of the dress after the discount?

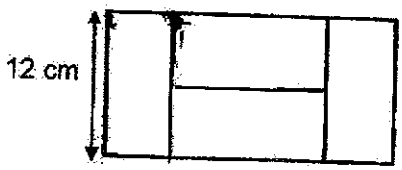
(1) $18

(2) $54

(3) $70

(4) $72

13. The figure is made up of 4 identical small rectangles.
The length of each small rectangle is 12 cm. What is the area of the figure?



(1) 144 cm^2

(2) 192 cm^2

(3) 288 cm^2

(4) 576 cm^2

14. A group of children was asked to choose their favourite canteen stall. The table represents the children's choices. 55% of the children chose Korean food and Japanese food. Part of the table is covered by an ink blot.

Canteen Stall	Number of children
Thai Food	16
Korean Food	
Japanese Food	
Western Food	20

What was the total number of children who chose Korean food and Japanese food?

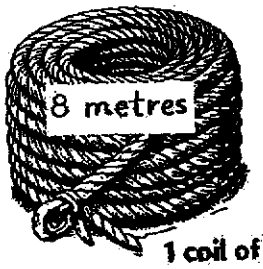
(1) 32

(2) 36

(3) 44

(4) 48

15. Tanya needs 23 pieces of rope for some outdoor activities. Each piece of rope needs to be 3 m in length. Rope is sold in coils of 8 m each. What is the least number of coils of rope that Tanya needs to buy?



1 coil of rope

(1) 12

(2) 11

(3) 9

(4) 8

End of Booklet A

PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)

END-OF-YEAR EXAMINATION, 2024

PRIMARY FIVE

MATHEMATICS
PAPER 1
(BOOKLET B)

NAME _____( )

CLASS : P 5 _____

DATE : 24 October 2024

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all the instructions carefully.
3. Answer all questions.
4. You are **not** allowed to use a calculator.

	Marks Obtained	/	Maximum Marks
Booklet B		/	25

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 $1 - \frac{1}{4} - \frac{1}{6}$

Ans: _____

17. Find the missing number in the box.

12 : 16 = 18 : ?

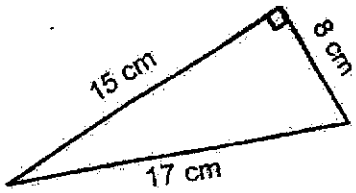
Ans: _____

18. Aileen painted her room from 9.30 a.m. to 11.15 a.m. How much time did Aileen spend painting her room? Give your answer in h and min.

Ans: _____ h _____ min

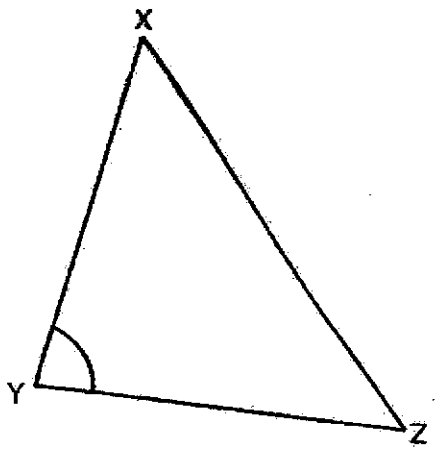
19. The figure shows a right-angled triangle.
Find the area of the triangle.

Do not write in this space



Ans: _____ cm^2

20. Measure and write down the size of $\angle XYZ$.



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)

Do not write in this space

21. (a) **Round** 15 742 to the nearest thousand.

Ans: (a) _____

(b) **Nicole** listed the factors of 45 below:

1, 5, 9, 45

She missed out two factors. What were the two missing factors?

Ans: (b) _____ and _____

22. (a) **Find** the value of $\frac{1}{2} \times \frac{3}{4}$

Ans: (a) _____

(b) **Find** the value of 5.24 × 7. Give your answer correct to 1 decimal place.

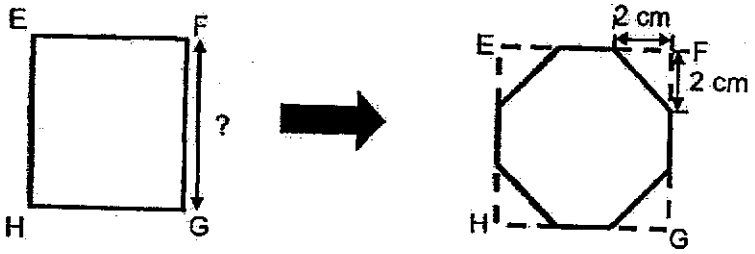
Ans: (b) _____

23. Mrs Lim had 220 dolls for sale. She sold 35% of them last week. How many dolls did she sell last week?

Do not write in this space

Ans: _____

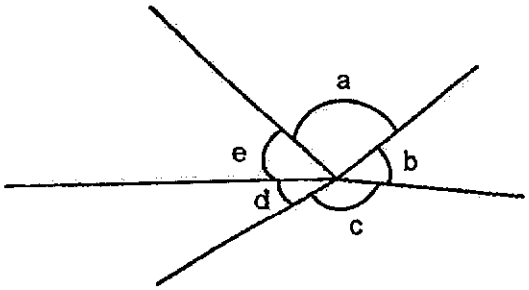
24. EFGH is a square piece of paper. Four identical triangles are cut out as shown. The remaining piece of paper has an area of 92 cm^2. What is the area of the square piece of paper?



Ans: _____ cm^2

25.

Do not write in this space



(a) Name the smallest **angle.**

Ans: (a) ∠_____

(b) Name the two angles **that** are greater than 90°.

Ans: (b) ∠_____ **and** ∠_____

26. Anna has a number of paper clips in three colours: blue, red and green $\frac{5}{9}$ of the paper clips are blue. The number of red paper clips is half the number of blue paper clips. What fraction of the paper clips are green?
Give your answer in the simplest form.

Do not write in this space

Ans: _____

27. The table shows how much a company charges for a cleaning job.

First 2 hours	$110
Every additional hour	$30

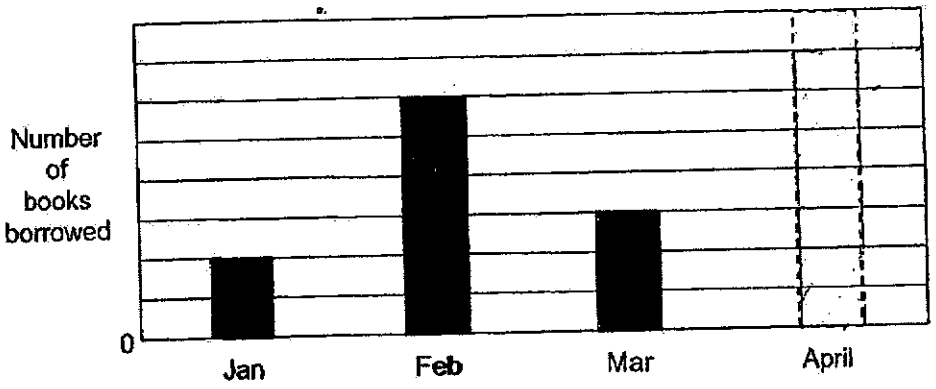
Teresa paid the company $200 for a cleaning job.
How many hours of cleaning did she pay for?

Ans: _____ h

Do not write in this space

Use the information below to answer questions 28 and 29.

The bar graph shows the number of **books** borrowed by Class 5A from January to April. The number of books is not **shown** on the scale.



28. $\frac{1}{3}$ of the books were borrowed in **February**. Draw and shade the bar that shows the number of books borrowed in **April**.

29. The average number of books borrowed for the 4 months was 54. How many books were borrowed **in January**?

Ans: _____

30. In Figure 1, ABCD is a rectangle with a perimeter of 48 cm.
Three such rectangles are joined to form rectangle WXYZ in Figure 2.
The perimeter of WXYZ is 120 cm.

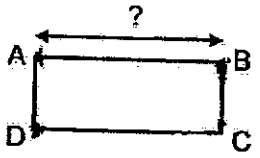


Figure 1

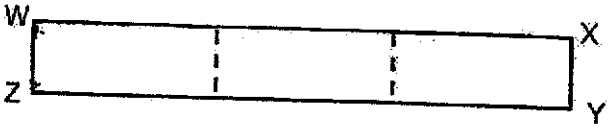


Figure 2

What is the length of AB?

Do not write in this space

Ans: _____ cm

PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)

END-OF-YEAR EXAMINATION, 2024

PRIMARY FIVE

MATHEMATICS
PAPER 2

NAME : _____( )

CLASS : P 5 _____

DATE : 24 October 2024

Total Time for Paper 2: 1 h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all the instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. You are allowed to use a calculator.

	Marks Obtained / Maximum Marks
PAPER 2	/ 55

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

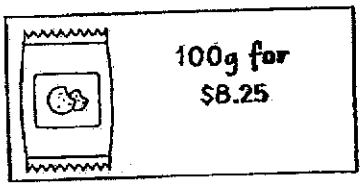
1. Sarah bought 5 bottles of water and 4 buns for $21.20.
   Agnes bought 1 bottle of water and 1 bun for $4.50.
   How much did 1 bottle of water cost?

$21.20

$4.50

Ans: $_____

2. Three friends shared the cost of 800 g of cookies in the ratio 1 : 4 : 5.
   What was the cost for the smallest share?



Ans: $ _____

3. What is the price of the chair after adding 9% GST?

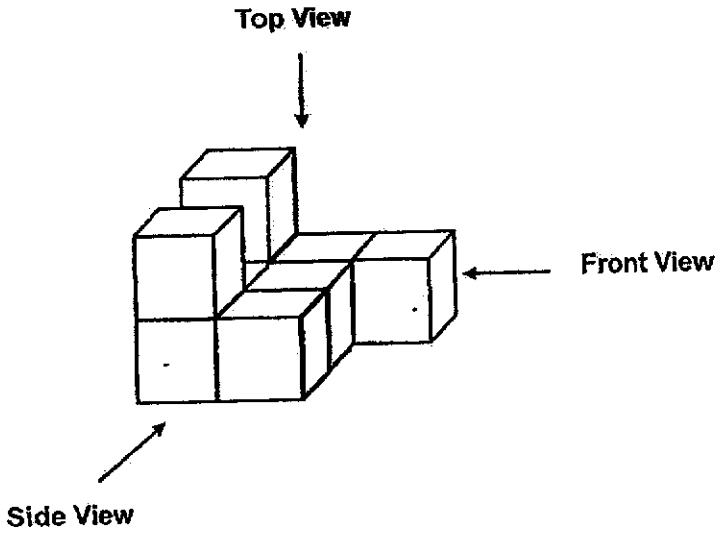
Do not write in this space

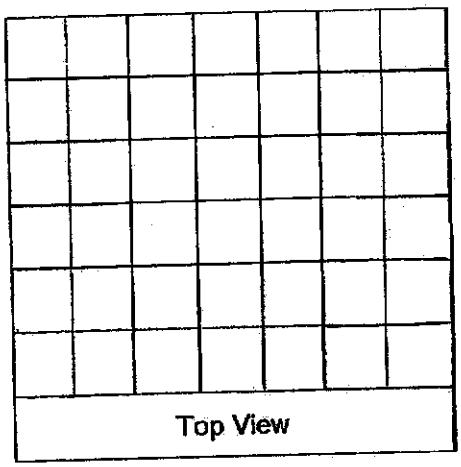
Ans: $ _____

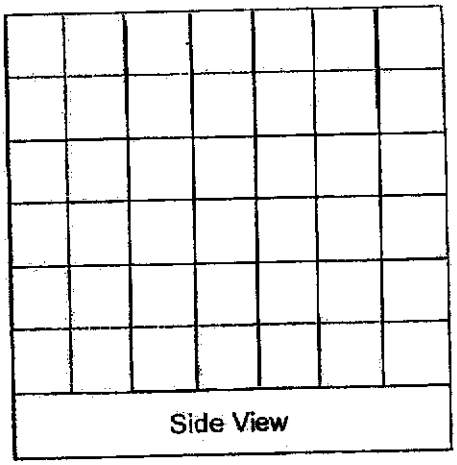
Do not write in this space

4. The following solid is made up of 8 **unit** cubes.

Draw the top and side views of the **solid** on the square grid below.

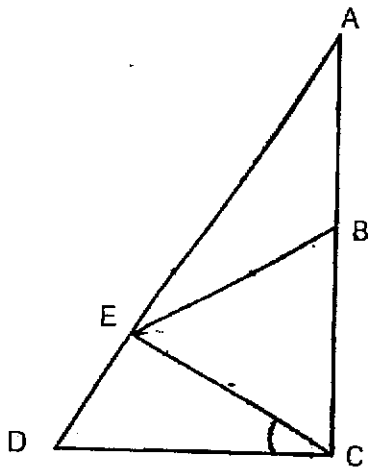






5. In the figure, ACD is a right-angled triangle. BCE is an equilateral triangle. BEA is an isosceles triangle with AB = BE. B is the mid-point of AC.

Do not write in this space



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.

Statement	True	False	Not possible to tell
AEC is a right-angled triangle.			
∠CAE is the same as ∠DCE .			
The area of triangle BEC is greater than the area of triangle ABE.			

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)

Do not write in this space

6. The fee for parking a car at a mall is based on the charges shown in the table below.

First hour	$4.50
Every additional 30 min or less	$2.00

(a) Mrs Wu parked her car at the mall from 10.40 a.m. to 12.05 p.m. How much was her parking fee?

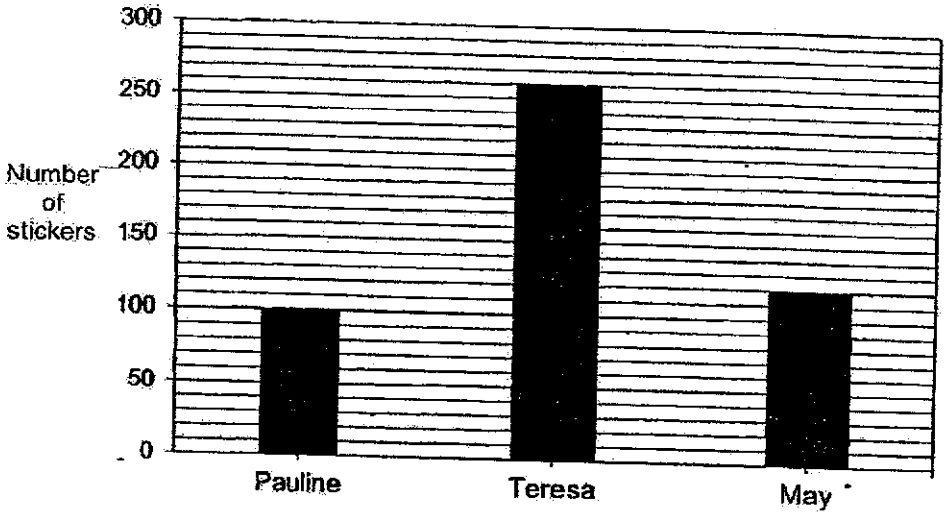
Ans: _____ [1]

(b) Mrs Lim paid $18.50 for her parking at the mall. She left the mall at 3.15 p.m. What would be the earliest time she drove into the carpark?

Ans: _____ [2]

7. The bar graph shows the number of stickers that three girls had collected.

Do not write in this space



(a) What was the average number of stickers the 3 girls had collected?

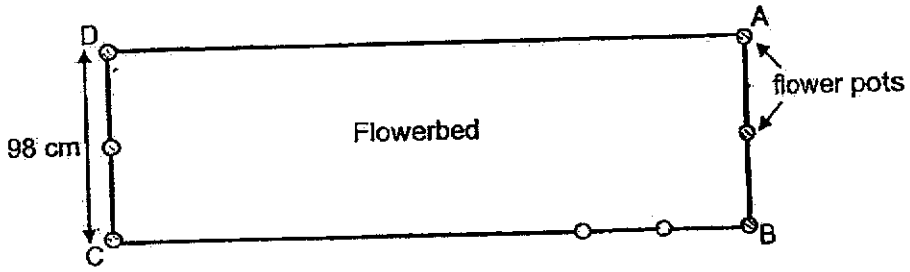
Ans: (a) _____ [2]

(b) Bryan then joined in the group and the average number of stickers collected by the four children was 26 more than the average number of stickers collected by the three girls. How many stickers did Bryan collect ?

Ans: (b) _____ [2]

8. A total of 16 pots of flowers are arranged at an equal distance apart along three sides, AB, BC and CD, of a rectangular flowerbed. The figure shows part of the arrangement. The breadth of the flowerbed is 98 cm. What is the length of BC?

Do not write in this space



Ans: _____ [3]

9. A box contained black pens and red pens. At first, the number of black pens was $\frac{1}{4}$ the number of red pens. After $\frac{1}{3}$ of the black pens and $\frac{5}{8}$ of the red pens were sold, 117 pens were left.

Do not write in this space

(a) What fraction of the pens were sold?

Leave your answer in the simplest form.

Ans: (a) _____ [1]

(b) What was the total number of pens in the box at first?

Ans: (b) _____ [2]

10. Mr Goh had an equal number of apples and oranges. He gave 121 apples and 27 oranges to Nicole. He then gave the remaining fruits to Suki. The number of oranges Suki received was thrice the number of apples.

Do not write in this space

(a) How many apples did Suki receive ?

Ans: (a) _____ [2]

(b) How many fruits did Mr Goh have at first ?

Ans: (b) _____ [2]

11. Every student in a camp signed up for one activity.
25% of the students signed up for Soccer.

Do not write in this space

Activity	Percentage of students
Soccer	25%
Basketball	?
Dance	?

(a) The ratio of the number of students who chose Basketball to the number of students who chose Dance was 4 : 1.
What percentage of the students signed up for Dance?

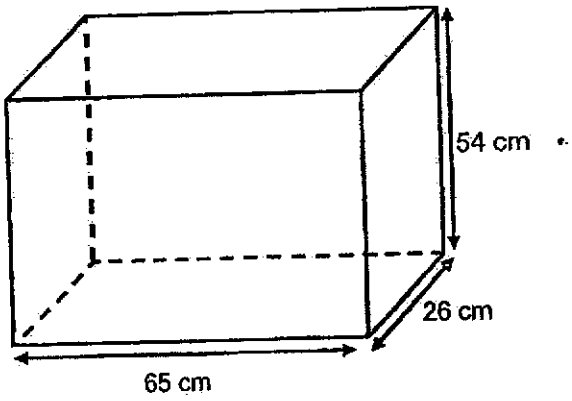
Ans: (a) _____ [2]

(b) There were 320 students at the camp.
15% of the students who signed up for Soccer were girls.
How many boys signed up for Soccer ?

Ans: (b) _____ [2]

12. Andy and Betty each has a rectangular tank as shown in the figure.

Do not write in this space



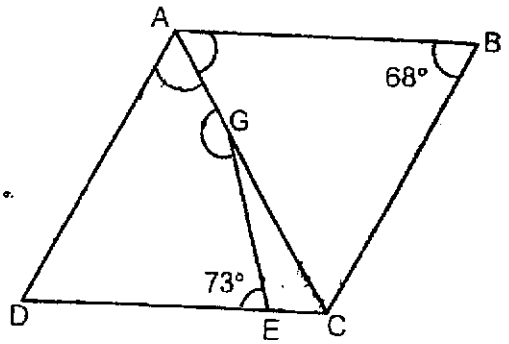
(a) Andy fills his tank completely with water. What is the volume of the water in the rectangular tank? Give your answer in ℓ and m ℓ

Ans: (a) _____ [2]

(b) Betty puts as many 3-cm cubes as possible into her empty tank. What is the greatest number of cubes that her rectangular tank can hold?

Ans: (b) _____ [2]

13. ABCD is a rhombus. AGC is a straight line.



Do not write in this space

(a) Find ∠BAC.

Ans: (a) _____ [1]

(b) Find ∠EGA.

Ans: (b) _____ [2]

14. There were 442 guests at a party. After $\frac{2}{3}$ of the men and $\frac{1}{5}$ of the women left the party, there were an equal number of men and women remaining at the party.

Do not write in this space

(a) How many women left the party?

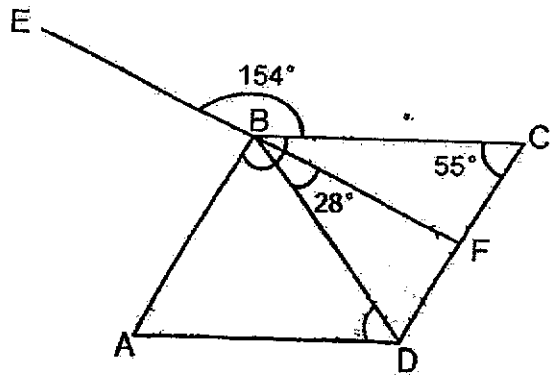
Ans: (a) _____ [2]

(b) How many guests remained at the party?

Ans: (b) _____ [2]

15. In the figure below, ABCD is a parallelogram and EBF is a straight line.
$\angle CBE = 154°$, $\angle BCD = 55°$ and $\angle DBF = 28°$

Do not write in this space



(a) Find $\angle CBA$.

Ans: (a) _____ [1]

(b) Find $\angle BDA$.

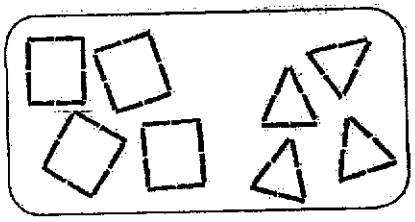
Ans: (b) _____ [2]

(c) *Circle the words that describe Triangle ABD correctly in the following statement:*

Triangle ABD **(is / is not)** an isosceles triangle because it **(has / does not have)** 2 equal angles. [1]

16. Mavin and Rene used straws to make squares and triangles.
8 straws are used to make a square and 6 straws are used to make a triangle.

Do not write in this space



(a) Mavin used the same number of straws to make some squares and some triangles. He used fewer than 50 straws for each shape. What was the greatest possible number of straws that he used to make the triangles?

Ans: (a) _____ [1]

(b) How many squares did Mavin make?

Ans: (b) _____ [1]

Go on to the next page

Continue from the previous page

(c) Rene made 7 more squares than triangles. The total number of straws she used was 462. How many squares did she make?

Ans: (c) _____ [3]

17. Alicia, Ben, Chris and Dion shared the cost of a gift.
Alice paid $\frac{2}{5}$ of the cost of the gift. Ben paid $\frac{3}{10}$ of the remaining cost of the gift and Chris paid $18 more than Ben. Dion paid $66 for the remaining cost of the gift.

Do not write in this space

(a) What was the total amount Ben, Chris and Dion paid for the gift?

Ans: (a) _____ [2]

(b) How much did the gift cost?

Ans: (b) _____ [2]

End of Paper 2

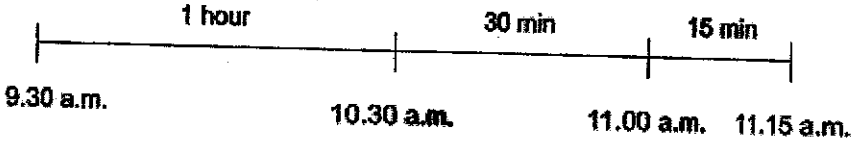
SCHOOL : PAYA LEBAR METHODIST GIRLS' PRIMARY
LEVEL : PRIMARY 5
SUBJECT : MATHEMATICS
TERM : SA2

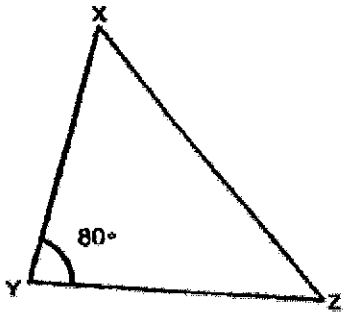
PAPER 1

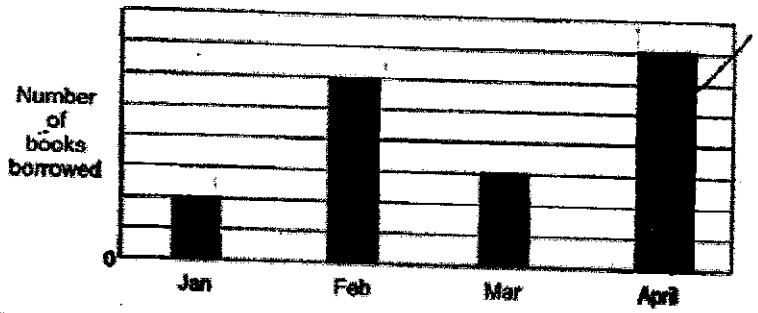
BOOKLET A

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

BOOKLET B

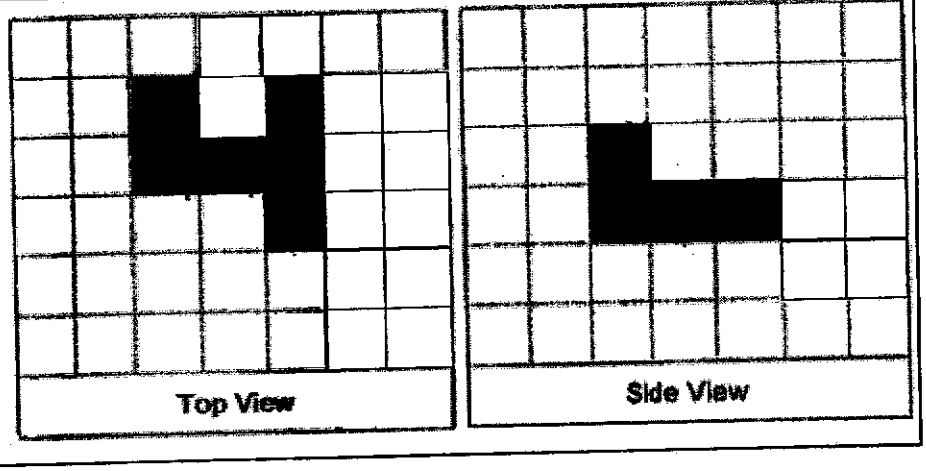
Q16	$1 - \frac{1}{4} - \frac{1}{6}$ $= \frac{12}{12} - \frac{3}{12} - \frac{2}{12}$ $= \frac{12 - 3 - 2}{12}$ $= \frac{7}{12}$
Q17	$12 \div 2 : 16 \div 2$ $6 \times 3 : 8 \times 3$ $18 : 24$
Q18	

Q19	$\text{Area} = \frac{1}{2} \times \text{base} \times \text{height}$ $= \frac{1}{2} \times 8\,\text{cm} \times 15\,\text{cm}$ $= \frac{1}{2} \times 120\,\text{cm}^2$ $= 60\,\text{cm}^2$
Q20	
Q21 (a)	$15\,742 \approx 16\,000$
Q21 (b)	Factors of 45 = 1, 3, 5, 9, 15, 45 Missing factors: 3, 15
Q22 (a)	$\frac{1}{2} \times \frac{3}{4}$ $= \frac{1 \times 3}{2 \times 4}$ $= \frac{3}{8}$
Q22 (b)	$5.24 \times 7 = 36.68$ Answer: 36.7
Q23	100% = **220** 1% = **220** ÷ 100 = 2.20 35% = **2.20** x 3.5 = 77

Q24	Area of each triangle $= \frac{1}{2} \times 2 \times 2 = 2\,\text{cm}^2$ Area of four triangles $= 4 \times 2 = 8\,\text{cm}^2$ Total area of square $= 92 + 8 = 100\,\text{cm}^2$ Area of square $= 100\,\text{cm}^2$ Length of one side $= \sqrt{100} = 10\,\text{cm}$
Q25 (a)	<d
Q25 (b)	<c and <a
Q26	Fraction of blue paper clips $= \frac{5}{9}$ Fraction of red paper clips $= \frac{1}{2} \times \frac{5}{9} = \frac{5}{18}$ Fraction of green paper clips $= 1 - \frac{5}{9} - \frac{5}{18}$ $= \frac{18}{18} - \frac{10}{18} - \frac{5}{18}$ $= \frac{3}{18} = \frac{1}{6}$
Q27	200 - 110 = 90 90 ÷ 30 = 3 3 + 2 = 5
Q28	
Q29	February: $\frac{1}{3}$ of total books Total books $= 6u \times 3 = 18u$ April: $18u - (2u + 6u + 3u) = 7u$

Q30	Perimeter of ABCD = **48cm** 2 x (Length + Width) = 48cm Length + Width = **24cm** Perimeter of WXYZ = 120cm 2 x (3 x Length + **Width**) = 120cm 3 x Length + Width = **60cm** 3 x Length + Width - **(**Length + Width) = 60cm - 24cm = 36cm 2 x Length = 36cm Length (AB) = 18**cm**

PAPER 2

Q1	\$4.50 x 5 = \$22.50 1 Bun = \$22.50 - **\$21.20** = \$1.30 1 Water = \$4.50 - **\$1.30** = \$3.20
Q2	Total ratio = 1 + 4 + **5** = 10 Smallest share = **800g** ÷ 10 = 80g 100g = \$8.25 1g = \$8.25 ÷ 100 = **\$0**.0825 80g = \$0.0825 x **80** = **\$6.60**
Q3	100**%** = \$370 1**%** = \$3.70 ÷ 100 = **\$3**.70 109**%** = \$3.70 x **109** = **\$**403.30
Q4	

<table>
<tr><td>Q5</td><td>
<table>
<tr><th>Statement</th><th>True</th><th>False</th><th>Not possible to tell</th></tr>
<tr><td>AEC is a right-angled triangle.</td><td>✓</td><td></td><td></td></tr>
<tr><td>∠CAE is the same as ∠DCE .</td><td>✓</td><td></td><td></td></tr>
<tr><td>The area of triangle BEC is greater than the area of triangle ABE.</td><td></td><td>✓</td><td></td></tr>
</table>
</td></tr>
<tr><td>Q6 (a)</td><td>Total fee: $4.50 + $2.00 = $6.50</td></tr>
<tr><td>Q6 (b)</td><td>Total paid: $18.50
First hour: $4.50
Remaining: $18.50 - $4.50 = $14
Additional time: $14 ÷ $2 = 7 (30 mins) = 3.5 hours
Total time parked: 1 hour + 3.5 hours = 4.5 hours
3:15 p.m. - 4.5 hours = 10:45 a.m.</td></tr>
<tr><td>Q7 (a)</td><td>100 + 260 + 120 = 480
480 ÷ 3 = 160</td></tr>
<tr><td>Q7 (b)</td><td>160 + 26 = 186
186 x 4 = 744
744 - 480 = 264</td></tr>
<tr><td>Q8</td><td>16 - 6 = 10
98 ÷ 2 = 49
10 + 1 = 11
49 x 11 = 539</td></tr>
<tr><td>Q9 (a)</td><td>Red pens = 4 parts, Black pens = 1 part
Total = 5 parts
Sold:
Black pens = $\frac{1}{3}$ of 1 part
Red pens = $\frac{5}{8}$ of 4 parts = 2.5 parts
Total sold = $\frac{1}{3} + 2.5 = \frac{17}{6}$
Fraction sold = $\frac{\frac{17}{6}}{5} = \frac{17}{30}$</td></tr>
<tr><td>Q9 (b)</td><td>13u = 117
1 u = 117 ÷ 13 = 9
30u = 9 x 30 = 270</td></tr>
</table>

Q10 (a)	121 - 27 = 94 2u = 94 1u = 94 ÷ 2 = 47
Q10 (b)	4u = 47 x 4 = 188 188 + 121 + 27 = 336
Q11 (a)	100% - 25% = 75% 75% ÷ 5 = 15%
Q11 (b)	25% x 320 = 80 100% - 15% = 85% 85% x 80 = 68
Q12 (a)	$65 \times 26 \times 54 = 91\,260\,(\text{cm}^3)$ $91\,260\,\text{cm}^3 = 91.26\,\text{L}$
Q12 (b)	65 ÷ 3 = 21R2 26 ÷ 3 = 8R2 54 ÷ 3 = 18 18 x 8 x 21 = 3024
Q13 (a)	$180^\circ - 68^\circ = 112^\circ$ $112^\circ \div 2 = 56^\circ$
Q13 (b)	$180^\circ - 56^\circ - 107^\circ = 17^\circ$ $180^\circ - 17^\circ = 163^\circ$
Q14 (a)	$\frac{1}{3} = 4u$ $4 \times 4 + 1 = 17$ $17u = 442$ $1u = \frac{442}{17} = 26$
Q14 (b)	$4 + 4 = 8$ $8u = 26 \times 8$ $= 208$

Q15 (a)	$180° - 55° = 125°$
Q15 (b)	$180° - 55° = 125°$ $180° - 99° = 81°$ $180° - 81° - 28° = 71°$ $125° - 71° = 54°$
Q15 (c)	Is not Does not have
Q16 (a)	One triangle uses 6 straws, 6 x 8 = 48 straws
Q16 (b)	48 ÷ 8 = 6
Q16 (c)	7 x 8 = 56 462 - 56 = 406 406 ÷ (8+6) = 29 29 + 7 = 36
Q17 (a)	\$66 + \$18 = \$84 4u = \$84 1u = 84 ÷ 4 = \$21 10u = 21 x 10 = \$210
Q17 (b)	\$210 ÷ 3 = \$70 \$70 x 5 = \$350