PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)

2025 PRELIMINARY EXAMINATION

PRIMARY SIX

MATHEMATICS
PAPER 1
(BOOKLET A)

NAME _____( )

CLASS : P 6 _____

DATE : 19 August 2025

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: _____

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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. 3 710 562 = 3 000 000 + 700 000 + _____ + 500 + 60 + 2

   (1) 100
   (2) 1000
   (3) 10 000
   (4) 100 000

2. Which of the following is the same as 40 km 70 m?

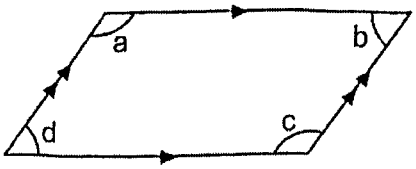
   (1) 40 700 m
   (2) 40 070 m
   (3) 4700 m
   (4) 4070 m

3. The total mass of 3 students is 162 kg.
   Another student, Megan, joins the group. She has a mass of 42 kg.
   What is the average mass of the 4 students?

   (1) 55 kg
   (2) 51 kg
   (3) 32 kg
   (4) 24 kg

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4. The figure below is a parallelogram.



Which of the following is true?

(1) $\angle a + \angle c = 180°$

(2) $\angle b + \angle d = 180°$

(3) $\angle a = \angle c$

(4) $\angle b = \angle c$

5. Simplify $8b + 15 - 3b - 9$

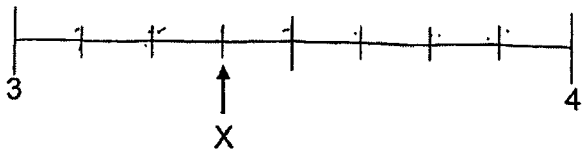
(1) $5b + 6$

(2) $5b + 24$

(3) $11b + 6$

(4) $11b + 24$

6. In the number line, what is the mixed number represented by X?



(1) $3\frac{4}{9}$

(2) $3\frac{3}{8}$

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

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

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7. Shay took a ferry from 8.25 a.m. to 1.00 p.m. How long was the ferry ride?

(1) 4 h 25 min
(2) 4 h 35 min
(3) 5 h 25 min
(4) 5 h 35 min

8. The table below shows the number of vouchers some participants won in a contest.

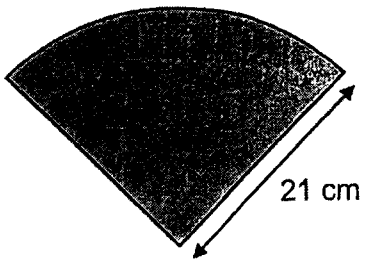
Number of vouchers	0	1	2	3	4
Number of participants	4	15	11	8	5

How many participants won at least 2 vouchers?

(1) 11
(2) 19
(3) 24
(4) 26

9. The shaded figure is a quarter circle of radius 21 cm.

Find the perimeter of the shaded figure. (Take $\pi = \frac{22}{7}$)

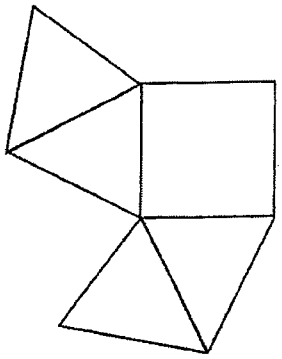


(1) 33 cm
(2) 54 cm
(3) 66 cm
(4) 75 cm

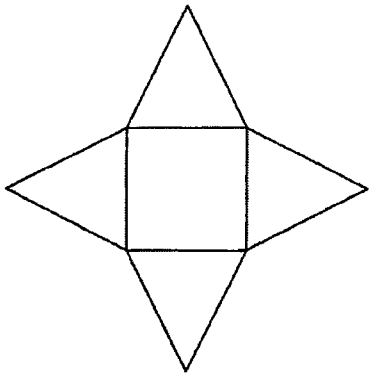
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10. Which of the following is **not** the net of a pyramid?

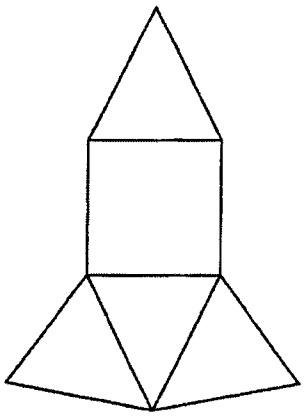
(1)



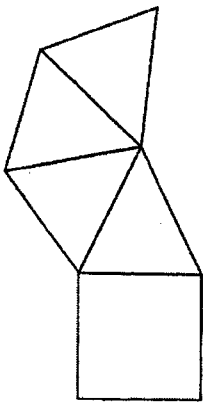
(2)



(3)



(4)



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11. Ariana had \$28. After buying 7 identical cups, she had \$y left.
Express the cost of 1 cup in terms of y.

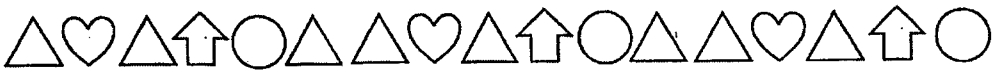
(1) $\$(28 - 7y)$

(2) $\$(28 - \frac{y}{7})$

(3) $\$(\frac{28y}{7})$

(4) $\$(\frac{28 - y}{7})$

12. Ryan uses 4 different shapes to form a pattern.
The first 17 shapes are shown below.



1st 17th

What fraction of the first 27 shapes are triangles?

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

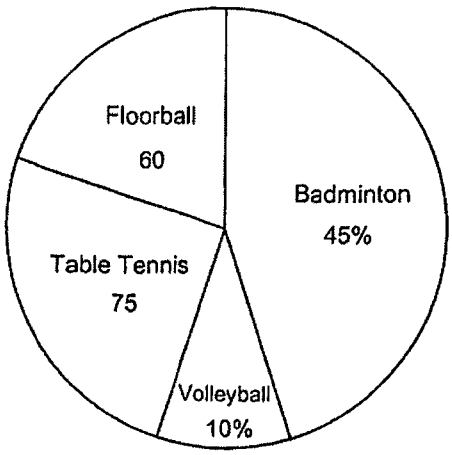
(2) $\frac{5}{9}$

(3) $\frac{8}{27}$

(4) $\frac{14}{27}$

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13. A group of children was asked to name their favorite sports.
45% of the children chose floorball and table tennis.
How many more children chose badminton than volleyball as their favourite sport?



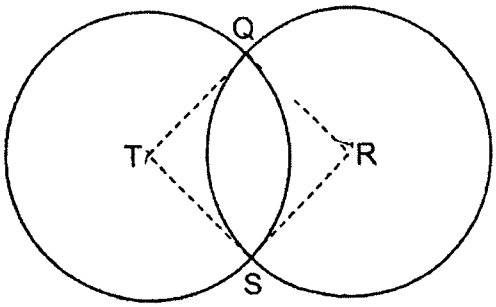
(1) 35
(2) 45
(3) 105
(4) 135

14. Alyssa baked some muffins for sale. She sold a total of 480 muffins in the morning.
In the afternoon, she sold $\frac{1}{8}$ of the remaining muffins.
In the end, she had 35% of the muffins left.
How many muffins did she bake?

(1) 520
(2) 648
(3) 792
(4) 800

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15. In a park, there were two identical circular running tracks with centres at R and T.
QRST is a square with a perimeter of 56 m.
Benny started running from Q. He ran round each circular track once.
Find the distance Benny ran. (Take $\pi = \frac{22}{7}$)



(1) 28 m

(2) 88 m

(3) 176 m

(4) 616 m

End of Booklet A

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PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)

2025 PRELIMINARY EXAMINATION

PRIMARY SIX

MATHEMATICS
PAPER 1
(BOOKLET B)

NAME : _____( )

CLASS : P 6 _____

DATE : 19 August 2025

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. Write your answers in this booklet.
5. You are **not** allowed to use a calculator.

	Marks Obtained / Maximum Marks
BOOKLET B	/ 25

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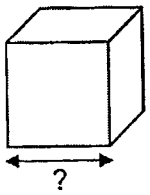
Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

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16. Express $\frac{3}{8}$ as a decimal.

Ans: _____

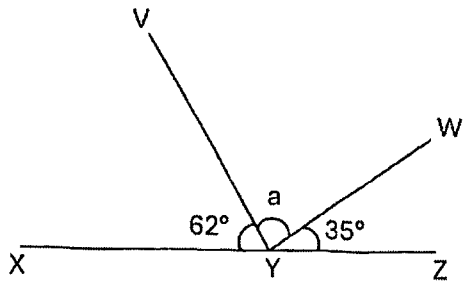
17. The volume of the cube is 125 m^3. Find the length of one side of the cube.



Ans: _____m

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18. XYZ, VY and YW are straight lines. Find $\angle a$.



Do not write in this space

Ans: _____ °

19. Find the missing number in the box.

6 : 8 = ? : 36

Ans: _____

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

Ans: _____

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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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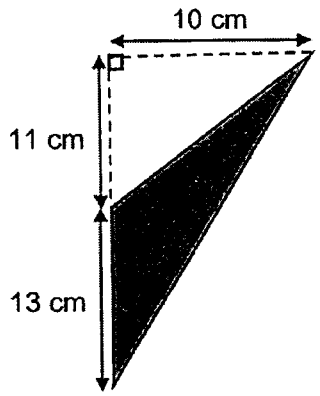
21. (a) Find the value of $18 \div \frac{3}{5}$

Ans: (a) _____

(b) Find the value of $(60 - 24) \div 9 + 3$

Ans: (b) _____

22. Find the area of the shaded triangle.

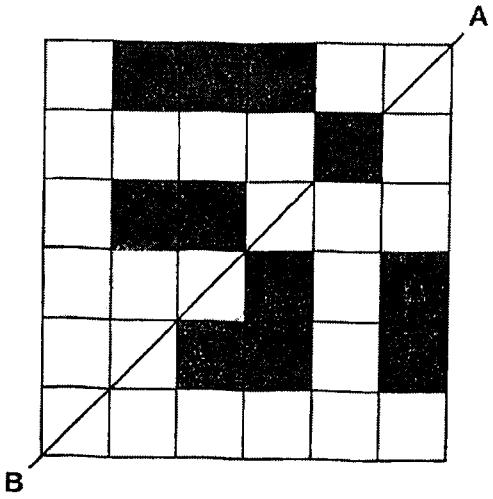


Ans: _____ cm^2

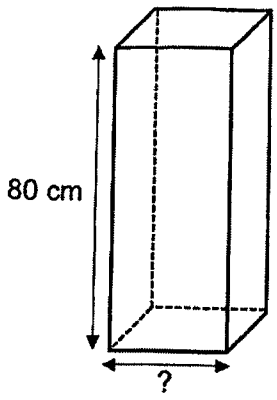
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23. Shade 2 more unit squares so that AB is the line of symmetry for the figure.

Do not write in this space



24. A tank with a square base has a capacity of 1280 mℓ.
The height of the tank is 80 cm. Find one side of the square base.



Ans: _____cm

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Do not write in this space

25. Aiden's scores for 5 games are shown in the table below.

Game	1st	2nd	3rd	4th	5th
Score	7	16	8	0	24

(a) Find his average score.

Ans: (a) _____

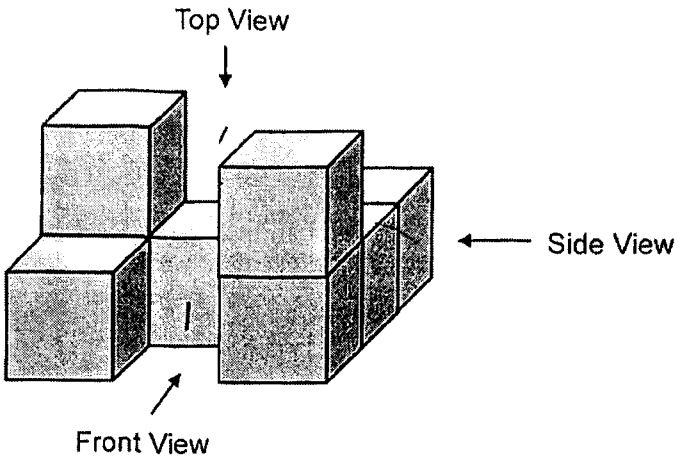
(b) After Aiden played his 6th game, his average score becomes 12.
What was his score for his 6th game?

Ans: (b) _____

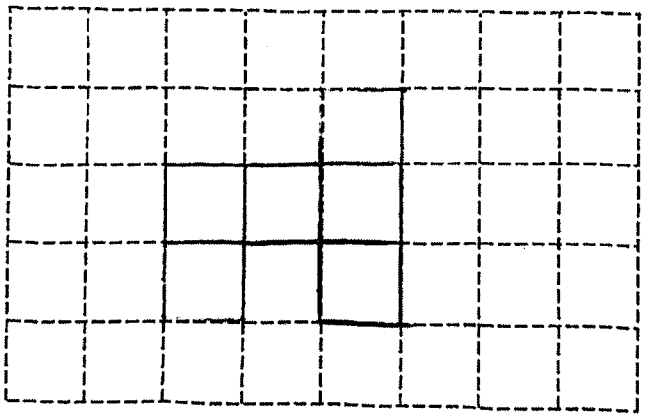
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26. Kate builds a solid using 8 identical unit cubes.

Do not write in this space



(a) Draw the top view of the solid in the square grid below.



(b) Find the **greatest** number of cubes that Kate can add to the above solid without changing the front view and side view.

Ans: _____ [ ]

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27. At 12 00, Helen and Thomas travelled in opposite directions from a shopping mall. Helen cycled at a constant speed of 24 km/h and Thomas drove at a constant speed of 57 km/h. How far apart were they at 14 00?

Do not write in this space

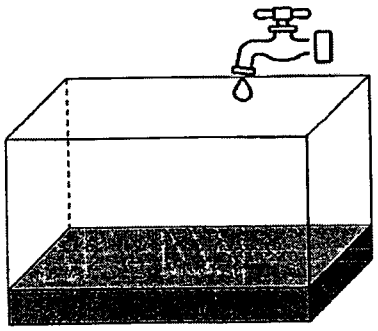
Ans: _____ km

28. A rectangular container with a base area of 4800 cm^2 is $\frac{1}{5}$ filled with water.

Water flows into the container from a tap at a rate of 8 litres per minute.

It takes 6 minutes to fill the container to its brim.

Find the height of the container.



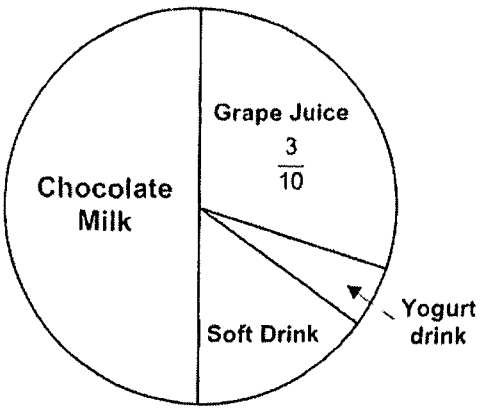
Ans: _____ cm

2

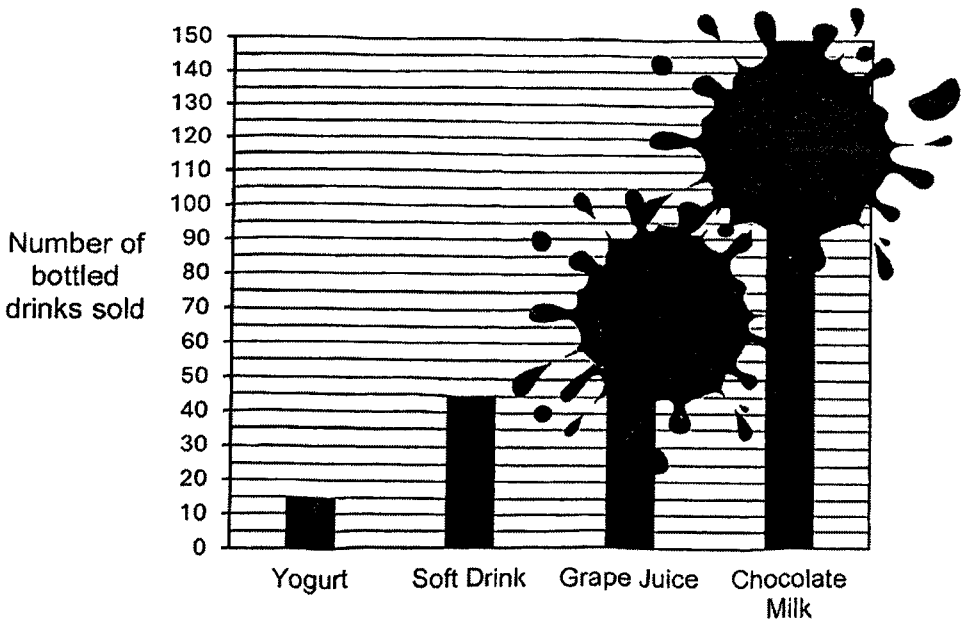
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29. The pie chart represents the number of bottled drinks sold at a stall.
Half of the bottled drinks sold were Chocolate Milk.

Do not write in this space



The number of bottled drinks sold at the stall is also represented by a bar graph.
Part of the graph had been stained by ink.



How many bottles of Chocolate Milk were sold?

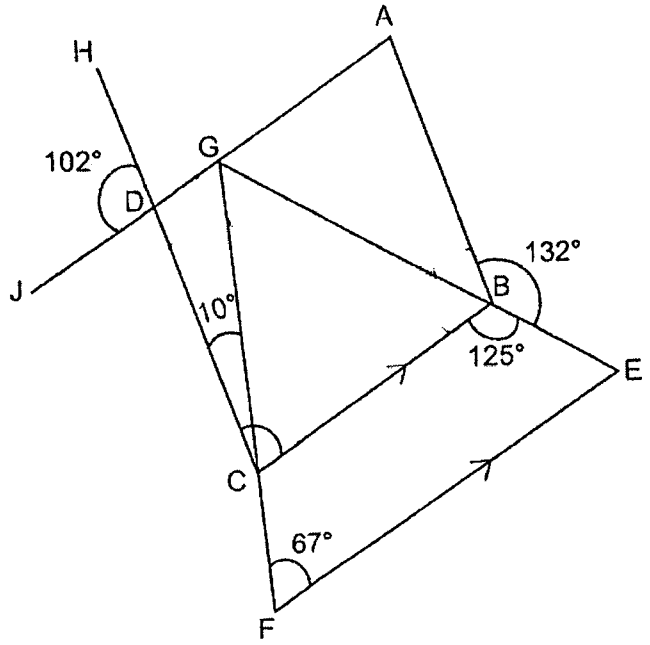
Ans: _____

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30. The figure below is not drawn to scale.

AGDJ, FCG and CDH are straight lines. BCFE is a trapezium.

BC is parallel to EF.



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

Statement	True	False	Not possible to tell
∠BCD = 67°			
∠ABC = 103°			
ABCD is a rhombus.			

Do not write in this space

End of Booklet B

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PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)

2025 PRELIMINARY EXAMINATION

PRIMARY SIX

MATHEMATICS
PAPER 2

NAME _____( )

CLASS : P 6 _____

DATE : 19 August 2025

Total Time for Paper 2: 1h 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.

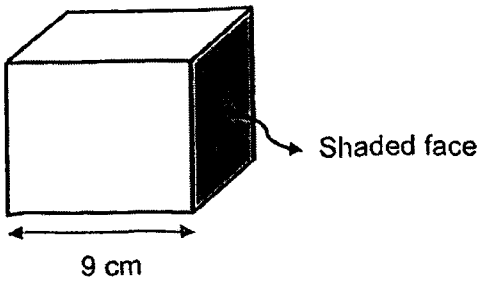
	Marks Obtained / Maximum Marks
PAPER 2	/ 55

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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)

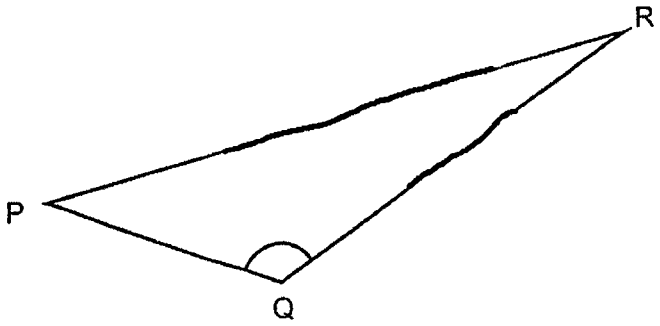
Do not write in this space

1. The area of the shaded face is 49 cm^2. What is the volume of the solid?



Ans: _____ cm^3

2.



Measure and write down

(a) the length of PR

Ans: (a) _____ cm

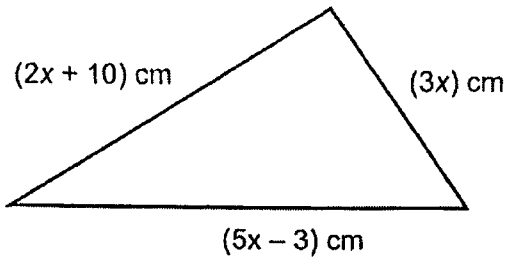
(b) the size of ∠PQR

Ans: (b) _____ °

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3. A triangle is formed by bending a piece of wire.
What is the length of the piece of wire?
Express your answer in terms of x in its simplest form.

Do not write in this space



Ans: _____cm

4. A fruit seller stored oranges in crates A and B. Crate A contained twice as many oranges as crate B. In crate A, $\frac{1}{2}$ of the oranges were ripe. In crate B, $\frac{5}{6}$ of the oranges were ripe. What fraction of all the oranges were ripe?

Ans: _____

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5. Mei had 18 more stickers than Aisha at first. After Mei gave some stickers to Aisha, she had 24 fewer stickers than Aisha. How many stickers did Mei give to Aisha?

Do not write in this space

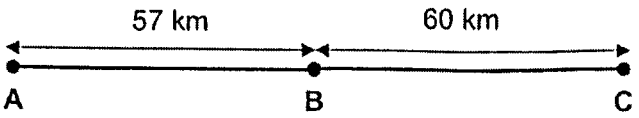
Ans: _____

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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)

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6. Mr Tan drove 57 km from Point A to Point B at an average speed of 76 km/h. From Point B, he drove another 60 km for $1\frac{1}{2}$ hours to reach Point C. What was his average speed for the entire journey? Express your answer in km/h.



Ans: _____ [3]

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7. Figure X below shows a square tile ABCD. It is made up of a triangle BCD, a quarter circle AFE and a shaded part BDEF. AF = FB.

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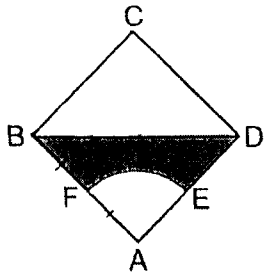


Figure X

(a) The area of triangle BCD is 32 cm^2.

What is the radius of the quarter circle AFE?

Ans: (a) _____ [1]

(b) Figure Y is made up of four such square tiles as shown in Figure X.

Find the total shaded area in Figure Y.

(Take $\pi = 3.14$)

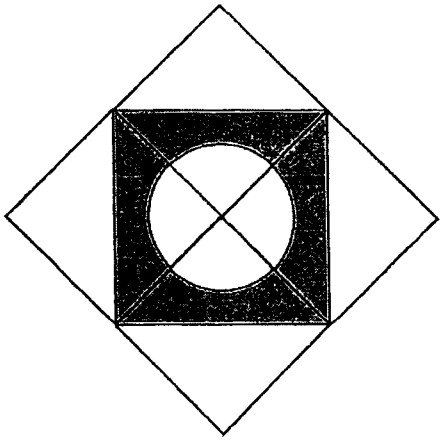


Figure Y

Ans: (b) _____ [2]

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8. Callys always spends 70% of her salary. Her salary for December was 40% more than that for November. As a result, she spent $560 more in December than in November. How much was her salary in December?

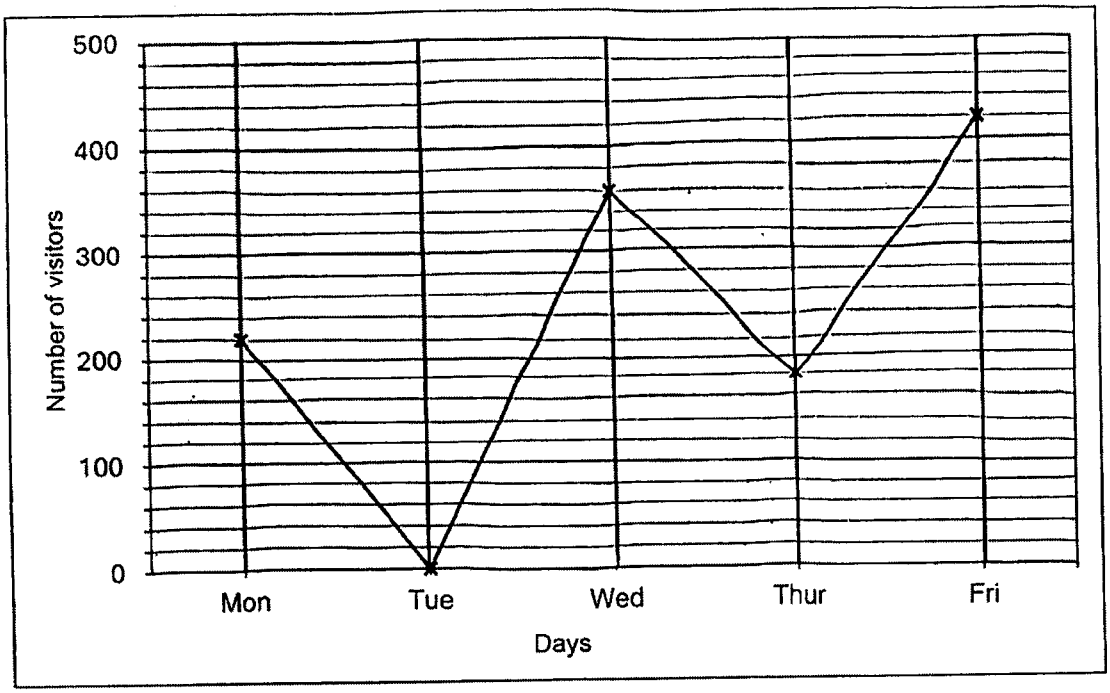
Do not write in this space

Ans: _____ [3]

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9. The line graph shows the number of visitors who took the tram in the zoo from Monday to Friday in a particular week.

Do not write in this space



(a) On which day was the tram service in the zoo closed for maintenance?

Ans: (a) _____ [1]

(b) Find the percentage increase in the number of visitors who took the tram from Thursday to Friday.

Ans: (b) _____ [2]

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10. Winnie and Sophie were paid a total of $3620 for a job.
Winnie was paid $1960 more than Sophie.

Do not write in this space

(a) How much was Winnie paid for the job?

Ans: (a) _____ [1]

(b) Winnie and Sophie were paid based on the number of days they worked.
Winnie worked 3 times as many days as Sophie.
Winnie was paid $5 more than Sophie per day.
How many days did Sophie work?

Ans: (b) _____ [3]

4

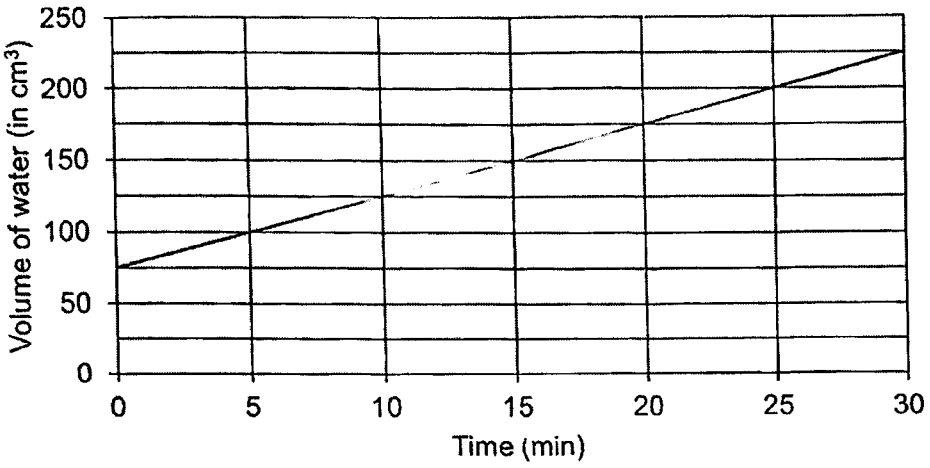
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11. At first, $\frac{1}{5}$ of a rectangular container was filled with water.

Do not write in this space

More water was collected into the container from a leaking tap for 30 minutes.

The line graph shows the volume of water in the tank over 30 minutes.



(a) How much water flowed into the container in one minute?

Ans: (a) _____ [1]

(b) At the end of 30 minutes, what fraction of the container was filled with water?

Ans: (b) _____ [1]

to be continued on the next page

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(c) At the end of 30 minutes, the container was filled with water to a height of 3 cm as shown in Figure Z. Find the possible pair of length and breadth of the container, given that both dimensions are whole numbers greater than 1 cm.

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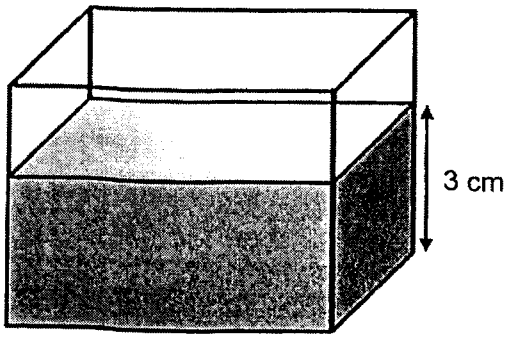


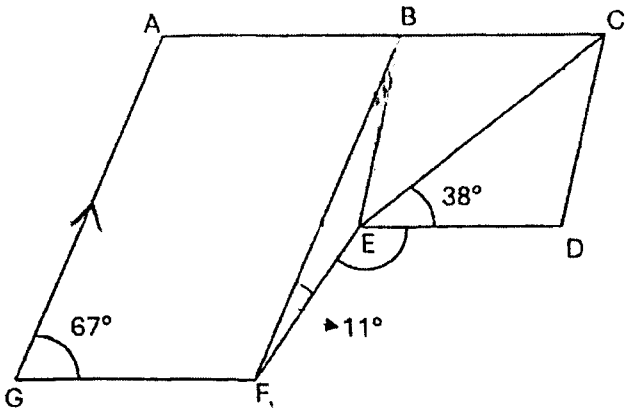
Figure Z

Ans: (c)_____ , _____ [2]

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12. In the figure, ABFG is a parallelogram and BCDE is a rhombus. ABC is a straight line. ∠AGF = 67°, ∠BFE = 11° and ∠CED = 38°.

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(a) Find ∠FBE.

Ans: (a) _____ [2]

(b) Find ∠DEF.

Ans: (b) _____ [2]

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13. The table shows the prices of entry tickets for a theme park.

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Type	Age	Price per ticket
Adult	Below 65 years old	$24
	65 years and above	$17
Child	Below 12 years	$10

The number of adult tickets sold was 6 times the number of child tickets sold.

$\frac{4}{5}$ of the adult tickets sold were for adults aged below 65 years old.

A total of $9464 was collected from the sale of tickets.

(a) What fraction of the tickets sold were for adults aged 65 years and above? Give your answer in the simplest form.

Ans: (a) _____ [2]

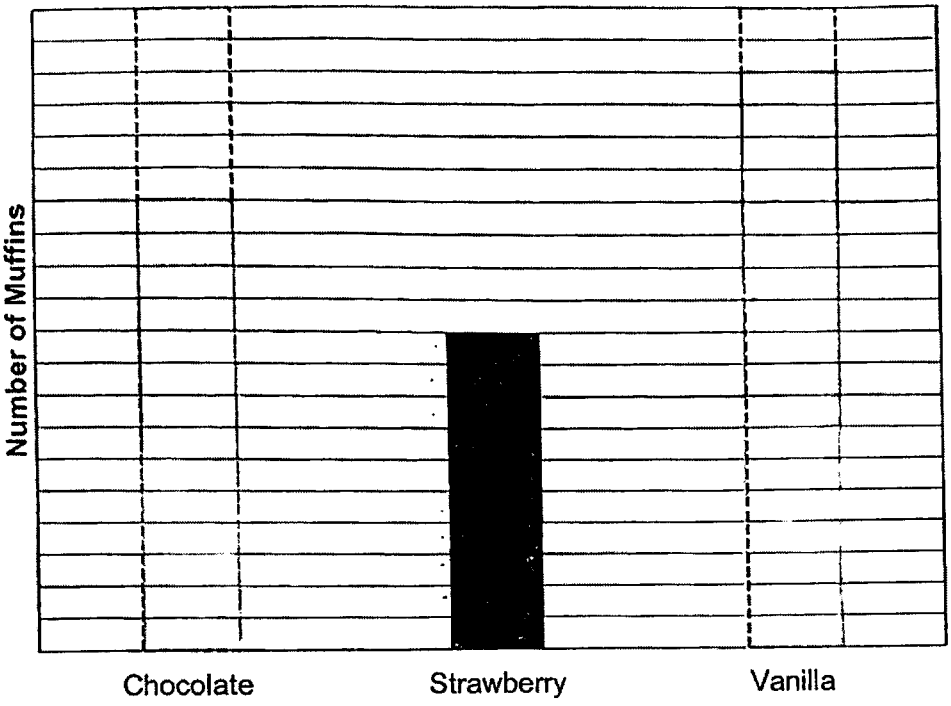
(b) What was the total number of tickets sold?

Ans: (b) _____ [3]

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14. Ben baked three types of muffins for sale. The number of each type of muffins Ben baked is represented by the bar graph below. The bars for the number of chocolate muffins and vanilla muffins have not been drawn.

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(a) The ratio of the number of chocolate muffins to strawberry muffins to vanilla muffins is 7 : 5 : 9.

Draw the bars that represent the number of chocolate muffins and vanilla muffins Ben baked in the graph above. [1]

to be continued on the next page

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(b) Ben sold all his strawberry muffins at $3.20 each. He collected a total of $192 from the sale of the strawberry muffins. How many muffins did he bake altogether?

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Ans: (b) _____ [3]

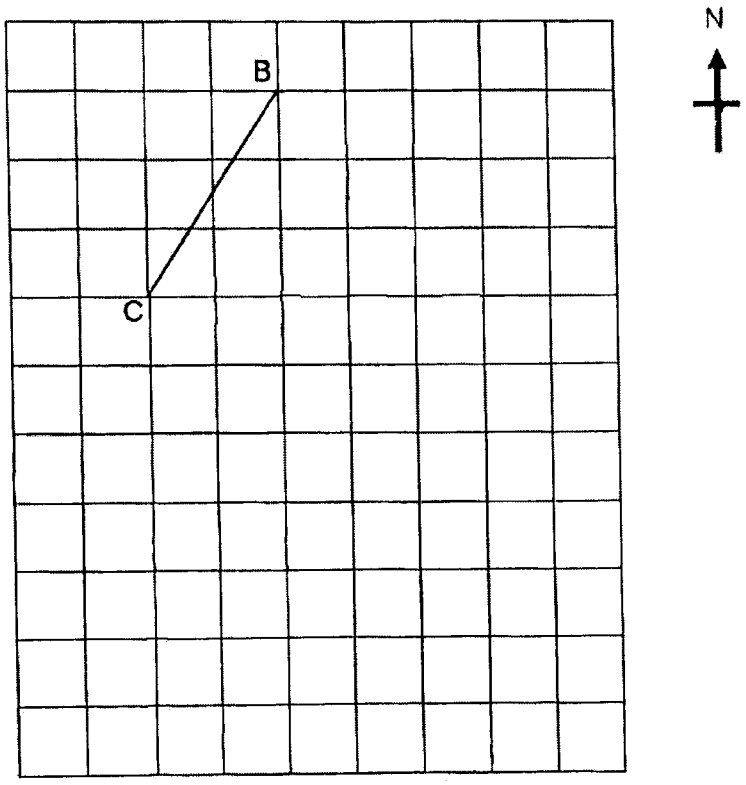
4

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15. In the 1-cm square grid below, line CB forms one side of an isosceles triangle CBE in which CB = BE.

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(a) Complete the drawing of triangle CBE on the grid such that Point E is east of Point C. Label your figure clearly. [1]



(b) Draw a right-angled triangle CEF on the grid such that EF is twice the length of BC. Triangle CEF must not overlap with triangle CBE.
Label your figure clearly. [1]

(c) Find the area of figure CBEF.

Ans: (c) _____ [2]

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16. There were some books on Shelf A and Shelf B. Emily took out $\frac{1}{7}$ of the books from Shelf A and placed them onto Shelf B. As a result, the ratio of the number of books on Shelf A to the number of books on Shelf B became 3 : 5. There were then 156 more books on Shelf B than on Shelf A.

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(a) What was the ratio of the number of books on Shelf A to the number of books on Shelf B at first?

Ans: (a) _____ [1]

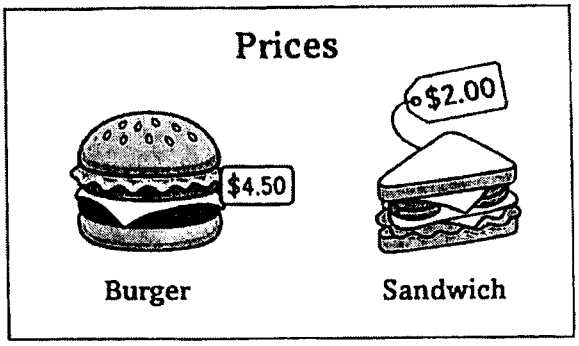
(b) How many books were there on Shelf B at first?

Ans: (b) _____ [3]

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17. Stall A and Stall B sold the same total number of burgers and sandwiches at a school carnival. The prices for both items are shown in the poster below.

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Stall A sold some burgers and 64 sandwiches.

Stall B sold some burgers and 96 sandwiches.

(a) Which stall collected more money? How much more?

Ans: (a) Stall : _____

Amount : _____ [2]

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(b) The total mass of burgers and sandwiches sold at Stall A was 8.32 kg. Each burger is 60 g heavier than each sandwich. What is the total mass of burgers and sandwiches sold by Stall B in kg?

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Ans: (b) _____ [2]

End of Paper 2

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SCHOOL : PAYA LEBAR METHODIST GIRLS' PRIMARY SCHOOL

LEVEL : PRIMARY 6

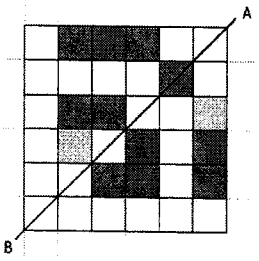
SUBJECT : MATH

TERM : 2025 PRELIM EXAM

BOOKLET A

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

BOOKLET B

Q16	$\frac{3}{8} = 0.375$	ANS : 0.375
Q17	$\sqrt[3]{125} = 5$	ANS : 5 m
Q18	$\angle a = 180° - 62° - 35° = 83°$.	ANS : 83°
Q19	Missing number = $36 \div 8 \times 6 = 27$.	ANS : 27
Q20	$\frac{3}{4} - \frac{2}{5} = \frac{15-8}{20} = \frac{7}{20}$.	ANS : $\frac{7}{20}$
Q21	(a) $18 \div 18 \div \frac{3}{5} = 18 \times \frac{5}{3} = 30$. (b) $(60 - 24) \div 9 + 3 = 36 \div 9 + 3 = 4 + 3 = 7$.	ANS : (a) 30 (b) 7
Q22	Area of the shaded triangle $= \frac{1}{2} \times 13 \times 10 = 65\ cm^2$	ANS : 65 cm^2
Q23		ANS : See figure

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Q24

$1280 \div 80 = 16\ \text{cm}^2$, $\sqrt{16} = 4$ cm.

ANS : 4 cm

Q25

(a) Average score = $(7 + 16 + 8 + 0 + 24) \div 5 = 55 \div 5 = 11$.

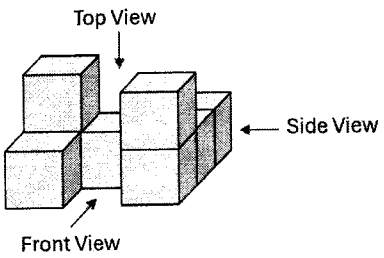
(b) Score for 6^{th} game = $12 \times 6 - 55 = 72 - 55 = 17$.

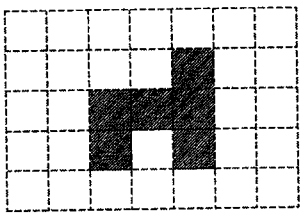
ANS : (a) 11

(b) 17

Q26

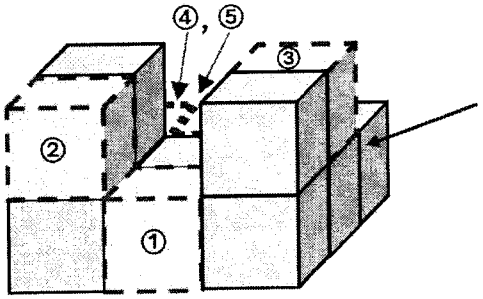
(a)





Top View

(b) **Greatest** number of cubes Kate can add to the solid without changing the front and side view is **5** as illustrated below:



Two cubes, ④ and ⑤ behind this cube

ANS : (a) See figure

(b) 5 cubes

Q27

Combined speed = 24 + 57 = 81 km/h.

Distance apart = $81 \times 2 = 162$ km.

ANS : 162 km

Q28

(a) Amount water flowed into the tank

= 8 l/min × 6 min = 48 l = 48000 ml = 48000 cm^3.

Height riased due to the inflow of water

= $48000 \div 4800 = 10$ cm.

$1 - \frac{1}{5} = \frac{4}{5}$ ➔ 10 cm.

$\therefore$ Height of the container = $10 \div \frac{4}{5} = 10 \times \frac{5}{4} = 12.5$ cm.

ANS : (a) 12.5 cm

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Q29

Fraction of bottled drinks sold were yogurt and soft drink

$= 1 - \frac{1}{2} - \frac{3}{10} = \frac{10-5-3}{10} = \frac{2}{10} = \frac{1}{5}$ ➔ 15 + 45 = 60.

Thus, total number of bottled drinks sold = $60 \times 5 = 300$.

$\therefore$ Number of bottles of Chocolate Milk sold = $\frac{1}{2} \times 300 = 150$.

ANS : 150.

Q30

(a) $\angle BCD = \angle GCD + \angle GCB = 10° + \angle GFE = 10° + 67° = 77°$.

(b) $\angle ABC = 360° - \angle ABE - \angle CBE = 360° - 132° - 125° = 103°$.

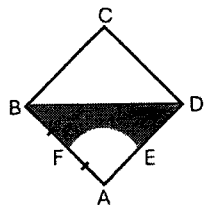
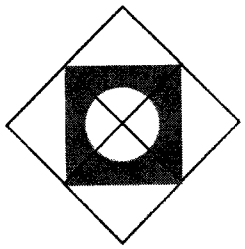
(c) $\angle BCD + \angle ADC = 77° + \angle JDH = 77° + 102° = 179° \neq 180°$.

$\therefore$ AD is not parallel to BC. ABCD is not a parallelogram and it certainly cannot be a rhombus.

S/No.	Statement	True	False	Not possible to tell
(a)	$\angle BCD = 67°$		✓	
(b)	$\angle ABC = 103°$	✓		
(c)	ABCD is a rhombus		✓	

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PAPER 2

Q1	Volume of the solid – 49 × 9 = 441 cm^3. ANS : 441 cm^3
Q2	(a) Length of PR = 9 cm. ANS : 9 cm (b) ∠PQR = 125°. ANS : 125°
Q3	Length of the piece of wire = 2x + 10 + 5x – 3 + 3x = (10x + 7) cm. ANS : (10x + 7) cm
Q4	Fraction of fruit in crate A = $\frac{2}{3}$, fraction of fruit in crate B = $\frac{1}{3}$. Total fraction of all the oranges were ripe $= \frac{2}{3} \times \frac{1}{2} + \frac{1}{3} \times \frac{5}{6} = \frac{1}{3} + \frac{5}{18} = \frac{6+5}{18} = \frac{11}{18}$. ANS : $\frac{11}{18}$
Q5	Number of stickers Mei gave to Aisha = (18 + 24) ÷ 2 = 42 ÷ 2 = 21. ANS : 21
Q6	Distance between Point A and Point C = 57 + 60 = 117 km. Time taken to travelled from Point A to Point B = 57 ÷ 76 = 0.75 hours. Total time taken to travelled from Point A to Point C = 0.75 + 1.50 = 2.25 hours. Average speed for the whole journey from Point A to Point C = 117 ÷ 2.25 = 52 km/h. ANS : 52 km/h
Q7	(a)  Area of triangle BCD = 32 cm^2. Area of square ABCD = 32 × 2 = 64 cm^2. Side of square, AB = $\sqrt{64}$ = 8 cm. Radius of quarter circle AFE = 8 ÷ 2 = 4 cm. (b)  Area of the shaded region = 32 × 4 – 3.14 × 4 × 4 = 77.76 cm^2 ANS : (a) 4 cm (b)77.76 cm^2

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Q8	(a) Tuesday was cCallys expenditure in December also increased by 40%. 40% ➔ \$560. 140% ➔ 560 ÷ 40 × 140 = \$1960 is her expenditure in Dec. Her salary in December \$1960 ÷ 70% = \$2800. ANS : \$2800
Q9	(a) The tram service was closed for maintenance in **Tuesday**. (b) Percentage increase in the number of visitors who took the tram from Thursday to Friday $= \frac{420-180}{180} = \frac{240}{180} = \frac{4}{3} = \frac{400}{3}\% = 133\frac{1}{3}\%$ ANS : (a) Tuesday (b) $133\frac{1}{3}\%$
Q10	(a) Amount received by Winnie = (3620 + 1960) ÷ 2 = \$2790. (b) Amount received by Sophie = \$2790 - \$1960 = \$830. Amount received by Winnie for the same number of days Sophie worked = \$2790 ÷ 3 = \$930. Number of days Sophie = $\frac{930-8}{5} = \frac{100}{5} = 20$. ANS : (a) \$2790 (b) 20 days
Q11	(a) 225 – 75 = 150 cm^3 of water flowed into the container for 30 minutes. ∴ Water flowed into the container at the rate = 150 ÷ 30 = 5 cm^3 in 1 minute. (b) $\frac{1}{5}$ ➔ 75 cm^3, capacity of the container = 75 × 5 = 375 cm^3. Fraction of the container filled with water = $\frac{225}{375} = \frac{3}{5}$. (c) Base area of the cointainer = 225 ÷ 3 = 75 cm^2 = 15 cm × 5 cm ANS : (a) 5 cm^3 (b) $\frac{3}{5}$ (c) 15 cm, 5 cm

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Q12

(a) $\angle ABF = \angle AGF = 67°$.

$\angle BEC = \angle CED = 38°$, $\angle CBE = 180° - 38° - 38° = 104°$.

$\therefore \angle FBE = 180° - \angle ABF - \angle CBE = 180° - 67° - 104° = 9°$.

(b) $\angle BEF = 180° - 11° - 9° = 160°$.

$\angle DEF = 360° - 160° - 38° - 38° = 124°$

ANS : (a) 9°

(b) 124°

Q13

(a) The ratio of the tickers sold for adults below 65 years old, 65 years old and above, and children below 12 years:

	Adult < 65		Adults ≥ 65		Children
	4	:	1		
LCM(5, 6) = 30	6	:			1
➔	24u		6u		5u

Fraction of the ticket sold were for adults aged 65 years and above = $\frac{6u}{35u} = \frac{6}{35}$.

(b) 24u × \$24 + 6u × \$17 + 5u × \$10 = \$(728u) = \$9464.

u = 9464 ÷ 728 = 13.

Total number of tickets sold = 35u = 35 × 13 = 455.

ANS : (a) $\frac{6}{35}$

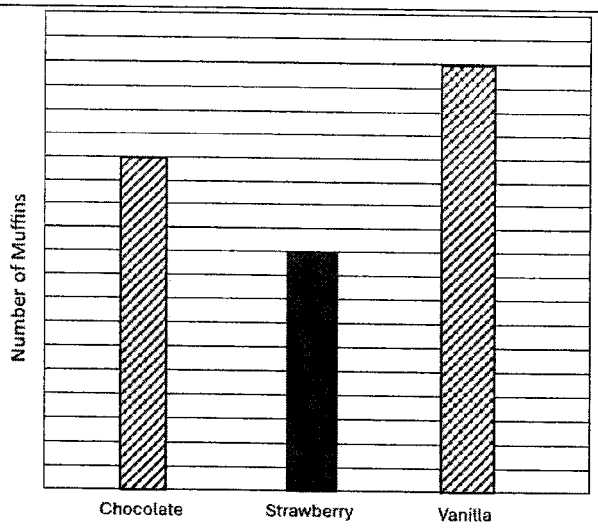
(b) 455

Q14

(a) Chocolate muffins : Strawberry muffins : Vanilla muffins

= 7 : 5 : 9 = 14 : 10 :18

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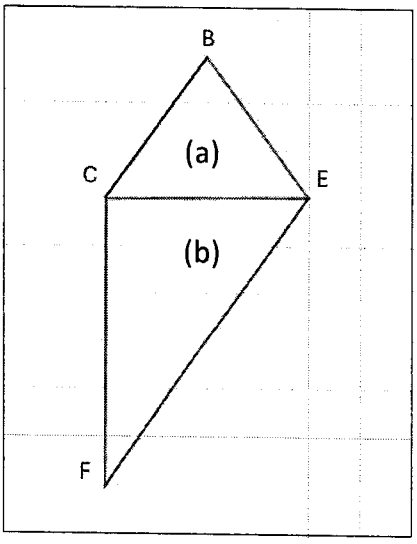


Ans : (a) See figure

(b) Total number of strawberry mufins sold
= \$192 ÷ \$3.20 = 60.
Total number of muffins baked
$= \frac{60}{5} \times (7 + 5 + 9) = 252.$

ANS : (b) 252

Q15 See below figure for (a) drawing of triangle CBE, and (b) drawing of right-angled triangle CEF:



(c) Area of figure CBEF $= \frac{1}{2} \times 4 \times 3 + \frac{1}{2} \times 4 \times 6 = 18$ cm^2.

ANS : (a) See figure
(b) See figure
(c) 18 cm^2

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Q16 (a) The ratio of the books on Shelf A and Shelf B before and after $\frac{1}{7}$ of the books was shifted from Shelf A to Shelf B is given below:

	Shelf A	Shelf B	Difference
Before	7u	9u	--
After	6u	10u	4u

(Note: 3 : 5 = 6 : 10 = 6u : 10u, 6u + u = 7u and 10u – u = 9u)

∴ Ratio of the number of books in Shelf A to the number of books on Shelf B = 7u : 9u = 7 : 9.

(b) 4u = 156, u = 156 ÷ 4 = 39, 9u = 9 × 39 = 351.

ANS : (a) 7 : 9
(b) 351

Q17 (a)

Name	Same total number of burgers and sandwiches	
Stall A	? some burgers	64 sandwiches
Stall B	? some burgers	96 sandwiches
Price	Burger -- $4.50 each, sandwiches -- $2.00 each	

Stall A collected more money than Stall B since each burger is more expensive than sandwich.

The additional amount collected from Stall A
= (96 – 64) × $(4.50 – 2.00)
= 32 × $2.50
= $80

(b) Total mass of the burgers and sandwiches sold by Stall B is less than that of the Stall A by,
= 32 × 60 g = 1920 g = 1.92 kg
∴ Total mass of the burgers and sandwiches sold by Stall B
= 8.32 – 1.92
= 6.40 kg

ANS : (a) Stall : A
Amount : $80
(b) 6.40 kg

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