Name:	
Class: I	Primary 6

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics

2025 Preliminary Examination

Paper 1

Booklet A

22 August 2025

15 questions 20 marks

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so. Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators is NOT allowed.

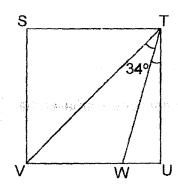
This booklet consists of 9 printed pages.

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)

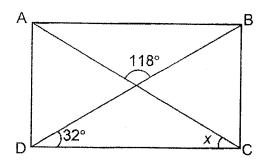
- 1. What is fifty-two thousand and forty-three in numerals?
 - (1) 5243
 - (2) 52 043
 - (3) 520 043
 - (4) 520 430
- 2. Which one of the following fractions is smaller than $\frac{3}{8}$?
 - $(1) \qquad \frac{1}{2}$
 - $(2) \qquad \frac{2}{7}$
 - (3) $\frac{5}{9}$
 - (4) $\frac{5}{12}$

- 3. Rosy had 300 buttons. She used 45 buttons for her project.
 What percentage of her buttons did she use for her project?
 - (1) 85%
 - (2) 55%
 - (3) 45%
 - (4) 15%
- 4. STUV is a square. Find ∠WTU.



- (1) 11°
- (2) 28°
- (3) 45°
- (4) 56°

5. ABCD is a rectangle. Find $\angle x$.

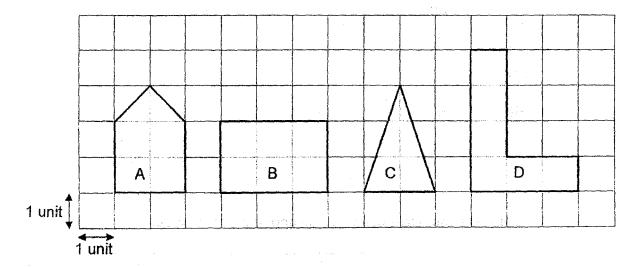


- (1) 30°
- (2) 32°
- (3) 62°
- (4) 86°

6. Arrange these distances from the shortest to the longest.

4.05 km 4 km 25 m
$$4\frac{2}{5}$$
 km

- 7. Clifford went trekking from 6.55 a.m. to 4.10 p.m. yesterday. How long did he trek?
 - (1) 8 h 15 min
 - (2) 9 h 15 min
 - (3) 9 h 45 min
 - (4) 10 h 15 min
- 8. Which two shapes shown in the grid have the same area?



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

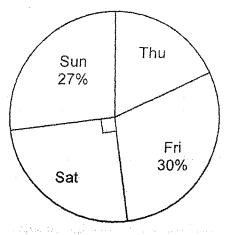
Use the information below to answer Question 9 and 10.

The table shows the number of green and orange beads packed into 4 boxes by Cassie.

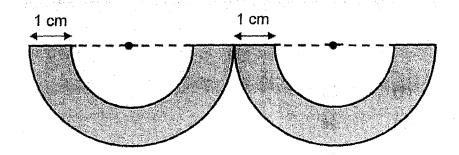
Вох	Green	Orange	Total
А	11	15	26
В	21	21	42
С	21	23	44
D	18	14	32

- 9. Which box has more green beads than orange beads?
 - (1) A
 - (2) B
 - (3) C
 - (4) D
- 10. How many more green beads does Cassie need to pack into Box C so that the number of green beads in Box C is 17 more than the total number of beads in Box D?
 - (1) 21
 - (2) 28
 - (3) 49
 - (4) 53

11. The pie chart shows the number of children at a drama workshop over 4 days.
50 children were there on Saturday. How many children were at the drama workshop on Thursday?

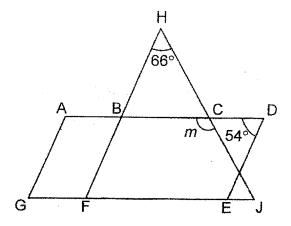


- (1) 82
- (2) 40
- (3) 36
- (4) 18
- 12. The outline of the shaded figure is formed by 2 identical small semicircles and 2 identical large semicircles. The radius of the small semicircle is 3 cm. Find the perimeter of the shaded parts. (Take $\pi = 3.14$)



- (1) 43.96 cm
- (2) 47.96 cm
- (3) 55.96 cm
- (4) For more papers, Go to: SeriousAboutSchool.com/OnlineExams

13. In the figure, ADEG is a parallelogram and FHJ is a triangle. GJ is a straight line. AG is parallel to BF. Find $\angle m$.



- (1) 120°
- (2) 123°
- (3) 126°
- (4) 127°
- 14. Freddy had \$250 and Karina had \$100 at first. After both of them spent an equal amount of money on a present, the amount of Freddy's money left was $\frac{7}{2}$ of the amount of Karina's money left. How much money did Freddy have left?
 - (1) \$220
 - (2) \$210
 - (3) \$80
 - (4) \$60

15. George packed 84 pears and 96 mangoes into as many bags as possible with no fruits left unpacked. He packed the same number of fruits in each bag. The number of each type of fruit in each bag was the same. How many bags of fruits did George pack?

- (1) 7
- (2) 8
- (3) 12
- (4) 15

Name:		()
Class:	Primary 6		

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics 2025 Preliminary Examination

Paper 1

Booklet B

22 August 2025

Booklet A	20
Booklet B	25
Total (Paper 1)	45

15 questions 25 marks

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

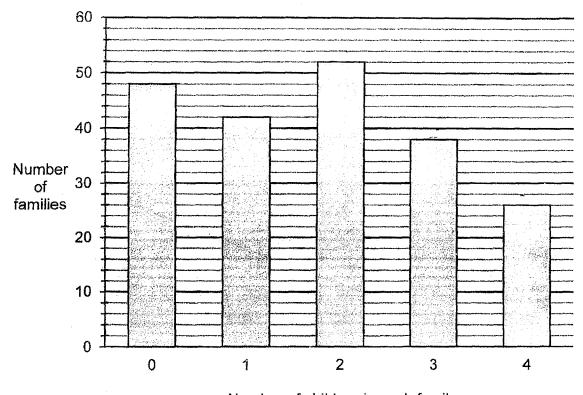
Do not turn over this page until you are told to do so. Follow all instructions carefully. Answer all questions.
Write your answers in this booklet.
The use of calculators is **NOT** allowed.

Questions 16 to 20 carry 1 mark 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. (5 marks)		
16.	Round 17.445 to the nearest tenth.	
	Ans:	
17.	Find the value of $\frac{6}{7}$ ÷ 15. Give your answer as a fraction in the simplest form.	
	Ans:	

18.	Desmond used pink stars and green stars to decorate a photo frame for his
	mother. For every 5 pink stars Desmond used, he used 4 green stars.
	Desmond used a total of 72 stars. How many green stars did Desmond use
	for the photo frame?
	•
	Ans:
19.	The total mass of 6 pails is 6.54 kg. Each pail has the same mass. What is the
10.	mass of 9 such pails?
	made of a such pane.
1.	
	Ans:g
	Ans:

20. The graph shows the number of children in the families living in Happy Estate.

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Number of children in each family

How many families have at least 2 children?

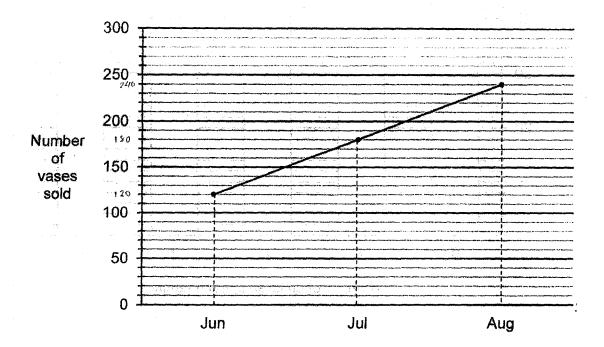
Ans: _____

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

Use the information below to answer Question 21 and 22.

The line graph shows the number of vases sold in a shop over three months.



21. The average number of vases sold from June to September was 190. How many vases were sold in September?

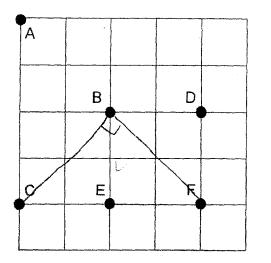
Ans:			
A113.	 	 	

22. The average number of vases sold in October and November was 18 more than the average number of vases sold from June to September. Find the total number of vases sold in October and November.

23.		bought 3 packets of stickers. Each packet contained <i>y</i> stickers. She kept kers for herself and gave the rest of the stickers equally to her 6 friends.
	(a)	How many stickers did each friend receive in terms of y?
	*	
		Ans: (a)
	(b)	Each friend received 8 stickers from Lina. Find the value of <i>y</i> .
	<u>.</u> .	
		Ans: (b)

24. The square grid shows the positions of Points A, B, C, D, E and F.

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(a) Ramsy walked directly from point E to point D in a straight line.
In which direction did Ramsy walk?

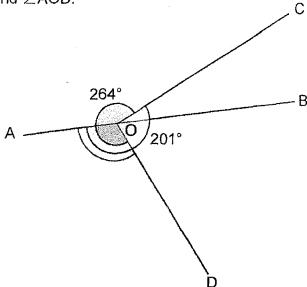
Ans: (a) _____

(b) Pan Ling stood at point B at first. After she turned 90° anti-clockwise, she faced F. Which point was Pan Ling facing at first?

Ans: (b) Point

25. In the figure, AOB is a straight line. $\angle AOC = 201^{\circ}$ and $\angle COD = 264^{\circ}$. Find $\angle AOD$.

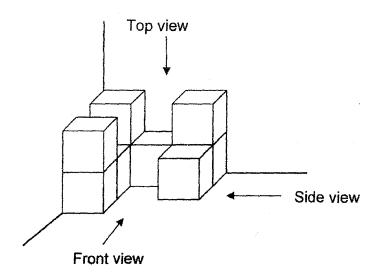
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Ans: ______

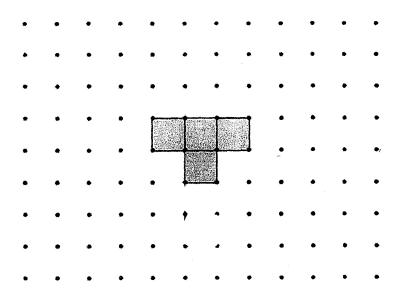
26. (a) Which 2 views of the solid are the same?

Do not write in this space



Ans:	viou and	Mon
Ans:	view and	view

(b) The four shaded squares form part of the net of a cube.Draw 2 more squares to complete the net of a cube.

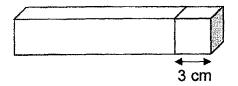


27. Aloysius travelled from Town J	to Town K. He travelled at an average speed of
60 km/h for a total distance of 1	150 km. He reached Town K at 6 p.m. What time
did Aloysius leave Town J?	

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Ans:	_	p.m.

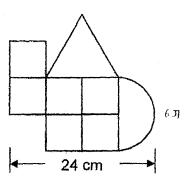
28. A cuboid and a cube are joined together to form a rectangular block as shown. The length of the cube is 3 cm. The volume of the cuboid is 5 times the volume of the cube. What is the volume of the rectangular block?



Ans:	cm ³

29. This figure is made up of 6 identical squares, a semicircle and an equilateral triangle. Find the perimeter of the figure. Leave your answer in terms of π .

Do not write in this space



Ans: _____ cm

30. Alizah baked some cupcakes. She gave $\frac{1}{6}$ of the cupcakes to her siblings and $\frac{1}{4}$ of the cupcakes to her classmates. She sold $\frac{1}{2}$ of the remaining cupcakes. At the end of the day, she was left with 49 cupcakes. How many cupcakes did Alizah give to her siblings?

Ans: _____

Name:	• ()
Class: Primary 6		

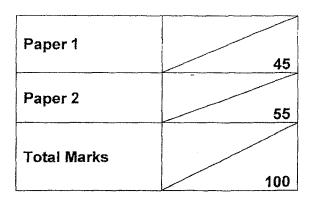
CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics 2025 Preliminary Examination

Paper 2

22 August 2025



Parent's/Guardian's Signature

Time: 1 hour 30 minutes

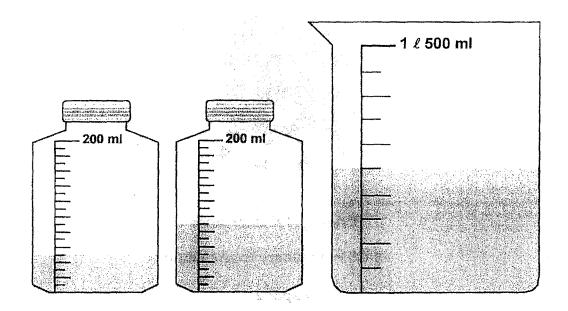
INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet
The use of an approved calculator is expected, where appropriate.

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 figure shows the amount of water in the bottles and jug at first.

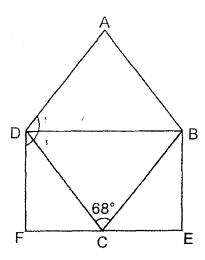


All the water in the bottles was poured into the jug without any spilling over. What would be the volume of the water in the jug in the end?

Ans:	, <u></u>	ť

2. ABCD is a rhombus and BEFD is a rectangle. \angle BCD = 68°. Find \angle ADF.

Do not write in this space



Ans : ______

3. At first, the cans in a shop were placed on 60 shelves with an equal number of cans on each shelf. 6 shelves were removed and the cans on these shelves were placed on the remaining 54 shelves. The number of cans on each remaining shelf was 40. How many cans were removed from the 6 shelves?

4. Benson had three fewer \$1 coins than 20¢ coins. He used all his \$1 coins and two 20¢ coins. The total value of the 20¢ coins left was \$2. How much money did Benson use?

Do not write in this space

Ans	:	\$

5. Melvin is given a card with 9 numbers. The number 89 is circled. He has to circle 2 more numbers so that the average of the 3 circled numbers is the same as the average of the 9 numbers on the card. Which 2 numbers does Melvin have to circle?

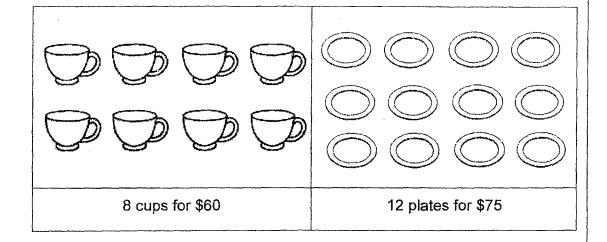
81	88	34
36	53	70
89	75	86

۱ns	:	and	

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 the brackets () at the end of each question or part-question. (45 marks)

Do not write in this space

6. In a shop, cups are sold in sets of 8 and plates are sold in sets of 12.



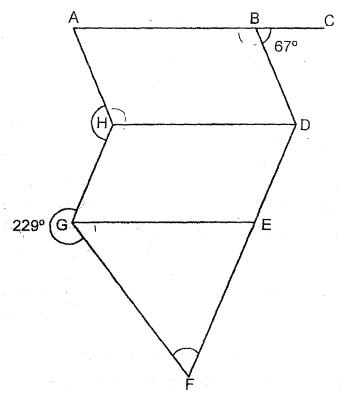
Lim Soon bought the same number of cups and plates.

He spent \$660 altogether. How many cups did Lim Soon buy?

Ans: _____[3]

7. The figure is made up of 2 identical parallelograms, ABDH and HDEG and a triangle, EFG. AC and DF are straight lines.

Do not write in this space



(a) Find ∠AHG.

Ans: (a)_____[1]

(b) Find ∠EFG.

Day	Number of curry puffs sold
Monday to Friday	2w per day
Saturday	w + 40
Sunday	9w - 5

(a) How many curry puffs were sold altogether last week? Express your answer in terms of *w* in the simplest form.

Ans	:	(a)	[1	
		` '		- 2

(b) Each statement below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
More curry puffs were sold on Saturday than on Monday.			
Each curry puff cost \$2. The amount of money collected on Monday was \$4w.			

9. The table shows how much an electrical company charges for electricity.

The charges are before GST.

Do not write in this space

Usage	Charges
First 180 units	\$0.25 per unit
Any usage above 180 units	\$0.35 per unit

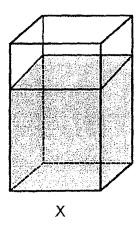
(a) In January, the Wang family used 260 units of electricity. How much did the Wang family pay for their usage after including a 9% GST?

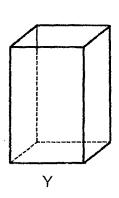
Ans : (a) _____[2]

(b) In February, the charges of electricity for the Wang family was \$60.05 before GST. How many units of electricity did the Wang family use in February?

Ans: (b) _____[1]

10. X and Y are two rectangular tanks. At first, X was filled with some water and Y was empty. The base area of Y is 135 cm². Some water was poured from X to Y without spilling. In the end, the amount of water in Y was 2430 cm³. The height of water in X was $\frac{3}{4}$ the height of water in Y. The amount of water then left in X was $\frac{2}{3}$ the amount of water in Y. What is the base area of X?





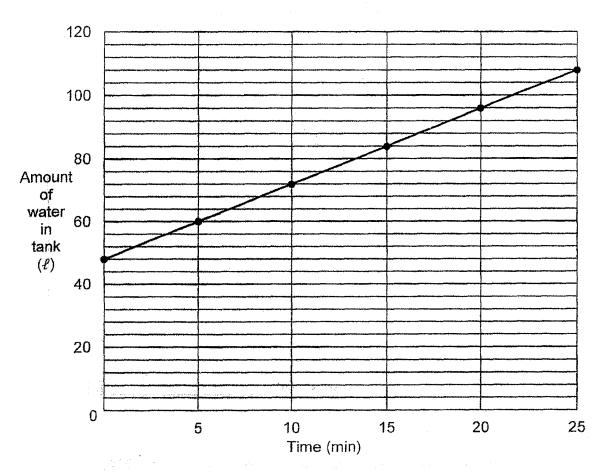
11. A file cost \$3.10 more than a pen. Hakim bought twice as many pens as files. He spent a total of \$92.70. He spent \$6.30 more on the files than on the pens. Find the total cost of a pen and a file.

A	10
Ans	_ !~

12.	12. A fitness club had 280 members in 2023, 40% of the members were			
		he rest were males. In 2024, the number of male members increased by		
	37.5%	6 and the female members dropped to 84 members.		
	(a)	Find the percentage decrease in the number of female members from		
	(a)	2023 to 2024.		
		2020 to 2024.		
		Afns: (a)[2]		
	(p)	What was the total number of members in the fitness club in 2024?		
		Ans: (b)[2]		

13. At first, $\frac{3}{8}$ of a fish tank was filled with water. A tap was turned on for more water to flow into the tank. It was then turned off after 25 minutes. The line graph shows the amount of water in the tank over the 25 minutes.

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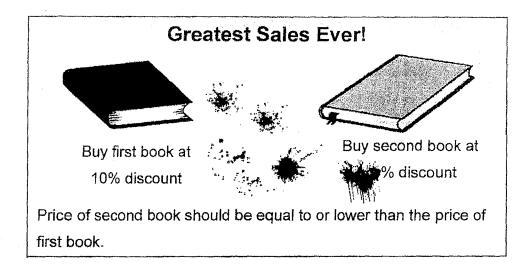


(a) How many litres of water flowed into the tank in one minute?

Ans : (a) ______[1]

(p)	At the end of 25 minutes, water?	what fraction of the tank, was r	not filled with
		Ans : (b)	[2]
		, , , , , , , , , , , , , , , , , , , ,	
(c)	e e	ain at the same rate as before	. How many
(c)	The tap was turned on ag		. How many
(c)	e e		. How many
(c)	more minutes did it take to		. How many
(c)	more minutes did it take to	fill the tank completely?	. How many
(c)	more minutes did it take to	fill the tank completely?	. How many
(c)	more minutes did it take to	fill the tank completely?	. How many
	more minutes did it take to	fill the tank completely?	. How many
	more minutes did it take to	fill the tank completely?	. How many
	more minutes did it take to	fill the tank completely?	

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Suzy bought two books at the sale as shown in the brochure as shown above. She accidentally spilled some ink on the brochure. The percentage discount given for the second book was smudged.

(a) Suzy paid \$21.05 for the two books. She paid \$1.45 less for the second book than the first book. How much did she pay for the first book?

(b) Find the original price of the	ne first book.	
	Ans : (b)	[1]

Do not write in this space

Suzy saved a total of \$3.70. Find the percentage discount for the

(c)

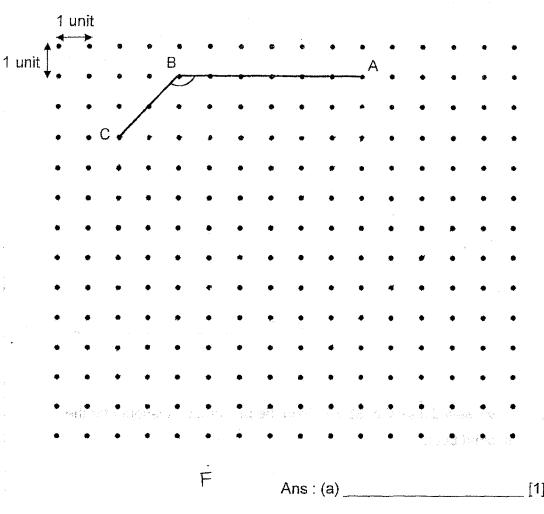
second book.

Ans: (c) [2]

15. In the grid, AB and BC are straight lines.

(a) Measure and write down the size of ∠ABC.

Do not write in this space



(b) AB and BC are two sides of a trapezium ABCD. BA is parallel to CD.CD is 2 units longer than BA. Complete the drawing of trapezium ABCD.

- (c) CD is also one of the sides of an isosceles triangle CDE. CD = DE.Draw triangle CDE. [1]
- (d) Draw rectangle DEFG such that it has the same area as triangle CDE.

 Rectangle DEFG must not overlap with trapezium ABCD and triangle CDE.

 [2]

Use a pencil to draw your diagrams and label them clearly.

16. Paul and Zalim went out together with a total of \$140.20. Zalim spent 4 times as much money as Paul. The amount of money Paul had left was \$12 more than $\frac{1}{2}$ of what Zalim spent. The amount of money Zalim had left was $\frac{1}{5}$ of what Paul had left.

Do not write in this space

(a) How much money did Paul spend?

Ans: (a) _____[3]

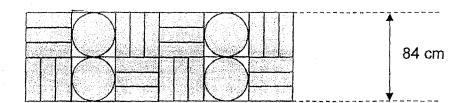
(b) How much money did Zalim have at first?

Ans: (b)

[2]

17. A footpath of length 25.2 m is tiled using identical rectangular tiles and identical circular tiles, following the pattern below. Each tile is in contact with those next to it. The width of the footpath is 84 cm. (Take $\pi = \frac{22}{7}$)

Do not write in this space



(a) How many rectangular and circular tiles were used to tile the entire footpath altogether?

(b)	Find the area	of the	footpath	not	covered	by tiles.
\~ <i>/</i>		0. 0.10	iootpati,	1100	00+01-04	by theo.

Do not write in this space

Ans: (b)	[3]
----------	-----

(c) All the tiles on the footpath need to be replaced. The cost to replace each type of tile is as shown in the table.

Type of tile	Cost per tile
Circular tile	\$3.20
Rectangular tile	\$1.80

What is the total cost to replace all the tiles on the footpath?

Ans: (c) _____[1]

表示的理解,这个可能是有1000多种种的,可以上通数,可能有效的。 化物 一定的 计数据的 一次的

SCHOOL : CHIJ ST NICHOLAS GIRLS' PRIMARY SCHOOL

LEVEL : PRIMARY 6

SUBJECT : MATHEMATICS

TERM : PRELIMINARY EXAMINATION

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

16	17.445 ≈ 17.4	17	$\frac{6}{7} \div 15 = \frac{6}{7} \times \frac{1}{15} = \frac{6}{105} = \frac{2}{35}$
18	5 + 4 = 9	19	9.81 × 1000 = 9810g
	72 ÷ 9 = 8		_
	8 × 4 = 32		
20	10 : 5 - 2	21	190 × 4 = 760
	10 ÷ 5 = 2		120 + 180 + 240 = 540
	52 + 38 + 26 = 90 + 26 = 116		760 - 540 = 220
22	190 + 18 = 208	23	a) 3 × y = 3y
	208 × 2 = 416		$(3y-3) \div 6 = \frac{3y-3}{6}$
			6
			b) 8 × 6=48
			48 + 3 = 51
			51 ÷ 3 = 17
24	a) North-East	25	360° - 264° = 96°
	b) C		201° - 96° = 105°
26	a) Front view and side view	27	$\frac{150}{60} = \frac{15}{6} = 2\frac{1}{2}$
	b) ::::::::::		60 6 2
			ANS: 3:30 pm
			,
	· · · · · · · · · · · · · · · · · · ·		
28	3 x 3 x 3 = 27	29	24 ÷ 4 = 6
	27 x 5 = 135		6 x 2 = 12
	135 + 27 = 162 cm ³		$\frac{1}{2}$ x π x 12=6 π
			6 x 12 = 72
			ANS: (6π + 72) cm
			· \ · =/

30	$\frac{7}{12} \rightarrow 49 \times 2 = 98$	
	$\frac{1}{12} \to 98 \div 7 = 14$	
	$\frac{2}{12} \rightarrow 14 \times 2 = 28$	

Paper 2

Paper	2		
1	200 ÷ 20 = 10	2	180 – 68 = 112°
	10 × 5 = 50		112 ÷ 2 = 56°
	10 × 9 = 90		90 + 56 = 146°
	90 + 50 = 140		
	1500 ÷ 10 = 150		
	150 × 5 = 750		
	750 + 140 = 890		
	ANS: 0.890λ		
3	54 × 40 = 2160	4	2 ÷ 0.2 = 10
	2160 ÷ 60 = 36		10 + 2 = 12
	36 × 6 = 216		12 - 3 = 9
			9 × 1 + (2 × 0.2) = \$9.40
5	81 + 88 + 34 + 36 + 53 + 70 + 89	6	6 × 60 = 360
	+ 75 + 86 = 612		75 × 4 = 300
	612 ÷ 9 = 68		360 + 300 = 660
	68 × 3 = 204		Ans: 48
	204 - 89 = 115		
	ANS: 81 and 34		
7	a) 180° - 67° = 113°	8	a) 2w × 5 = 10w
	113° × 2 = 226°		10w + w + 40 = 11w + 40
	360° - 226° = 134°		11w + 40 + 9w + 35
			ANS: 20w + 35
	b) 229° + 67° = 296°		
	Angle EGF = 360° - 296° = 64°		b)
	Angle GEF = 180° - 113° = 67°		- Not possible to tell
	180° - 64° - 67° = 49°		- True
9	a) 180 × 0.25 = 45	10	Height of water in Y
	260 - 180 = 80		2430 ÷ 135 = 18
	80 × 0.65 = 23		
	45 + 28 = 73		Height of water in X
	$\frac{9}{100} \times 73 = 6.57$		$\frac{3}{4} \times 18 = 13.5$
	73 ÷ 6.57 = 79.57		4
			X water volume:
	b) 180 × 0.25 = 45		$\frac{2}{3}$ × 2430=1620 cm ³
	60.05 - 45 = 15.05		3 2.55 .525 5
	15.05 ÷ 0.35 = 43		1620 ÷ 13.5 = 120 cm ²
	180 + 43 = 223		1020 + 13.5 - 120 CIII
11	92.70 - 6.30 = 86.40	12	a) Female $\rightarrow \frac{40}{100} \times 280 = 112$
	86.40 ÷ 2 = 43.20		
	43.20 + 6.30 = 49.50		Drop → 112 - 84 = 28
	•		

	43.20 ÷ 2 = 21.60	-	$\frac{28}{112}$ x 100% = 25%
	49.50 - 21.60 = 27.90	}	b) 2023 males → 280 -112 =
	27.90 – 3.10 = 9		168
	49.50 + 21.60 = 71.10		$\frac{37.5}{100} \times 168 = 63$
	71.10 ÷ 9 = \$7.90		
013	-) 60 40 42		168 + 63 + 84 = 315
Q13	a) 60 – 48 = 12	Q14	a) 21.05 – 1.45 = 19.60
	12 ÷ 5 = 2.4L		$19.60 \div 2 = 9.80$
	b) $\frac{3}{8} \rightarrow 48L$		9.80 + 1.45 = \$11.25
	$\frac{3}{8} \rightarrow 48 \div 3 = 16L$		b) 90% → 11.25
	_		$10\% \rightarrow 11.25 \div 9 = 1.25$
	$\frac{8}{8} \to 16 \times 8 = 128L$		100% \rightarrow 1.25 x 10 = 12.50
	128 - 108 = 20		C) \$3.70 - \$1.25 = \$2.45
	$\frac{20}{128} = \frac{5}{32}$		\$9.80 + 2.45 = 12.25
	c) $20 \div 2.4 = 8\frac{1}{2}$ min		$\frac{2.45}{12.25}$ x 100% = 20%
		. خام خان	
Q15	a) 135°	Q16	a) 37 units + \$12 + \$2,40=
	, . B		\$140.20
7 .			37 units = 14.20 – 12 – 2.40 =
	(b)		125.80
			1 units = 125.80 ÷37 = 3.4
			5 unit = 3.4 x 5 = \$17
			b) Zalim → 22 units + 2.40
-21			22 x 3.4 + 2.40 = \$77.20
	,		
٠ .	C)		
fe: 1			Service Space of Service States
}			
	d) · · · · · · · · · · · · · · · · · · ·		
Q17	a) 25.2m = 25.2 x 100cm =2520		
	84 ÷ 2 = 42		
	42 x 3 = 126		
	2520 ÷ 126 =20		
	20 x (6+1) = 140		
	140 x 2 = 280		
	b) 20 x 2 = 40		
	42 x 42 = 1764		

		$\frac{22}{7}$ x 21 x 21 = 1386	
	- 1	1764 - 1386 = 378	
		$378 \times 40 = 15120 cm^2$	
	c)	40 x 6 = 240	
		280 – 40 = 240	
•		240 x 1.80 = 432	
_{pr} mare		40 x 3.2 = 128	•
		432 + 128 = \$560	

4

END