METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887

END-OF-YEAR EXAMINATION 2024
PRIMARY 5
MATHEMATICS

PAPER 1
BOOKLET A

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.
Shade your answers in the Optical Answer Sheet (OAS) provided.
The use of calculators is **NOT** allowed.

Name: _____ ( )

Class: Primary 5._____

Date: 24 October 2024

This booklet consists of 7 printed pages including this page.

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) and shade your answer on the Optical Answer Sheet.

(20 marks)

---

1 40 000 + 6000 + 200 + 5 = _____

(1) 46 250
(2) 46 205
(3) 46 025
(4) 40 625

2 Which of the following is a common multiple of 6 and 9?

(1) 15
(2) 18
(3) 24
(4) 27

3 Which fraction is greater than $\frac{1}{2}$?

(1) $\frac{4}{8}$
(2) $\frac{4}{9}$
(3) $\frac{5}{9}$
(4) $\frac{5}{11}$

(Go on to the next page)

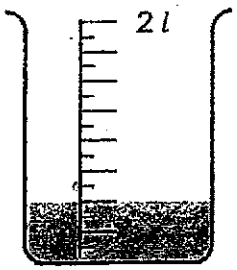
4 Express $\frac{1}{2}$ % as a decimal.

(1) 50
(2) 0.5
(3) 0.05
(4) 0.005

5 A factory takes 2 days to produce 5 tables.
At the same rate, how many days will it take to produce 40 tables?

(1) 8
(2) 10
(3) 16
(4) 20

6 How much water is in the container shown?



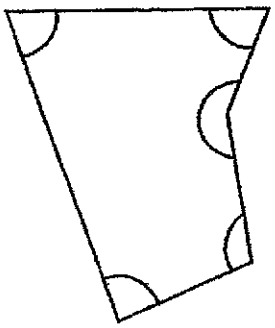
(1) 200 ml
(2) 400 ml
(3) 500 ml
(4) 800 ml

(Go on to the next page)

7 James had $200. He spent $70 on a wallet.
What percentage of his money did he spend on the wallet?

(1) 30%
(2) 35%
(3) 65%
(4) 70%

8 In the figure, how many of the five marked angles are more than 90°?



(1) 5
(2) 2
(3) 3
(4) 4

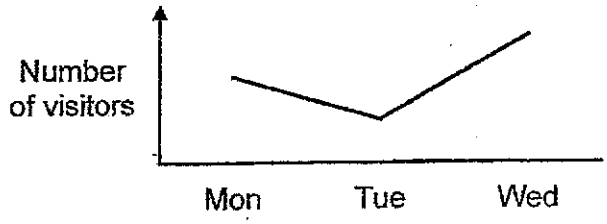
9 What is the value of $18 - (4 + 8) \div 3 \times 2$?

(1) 1
(2) 10
(3) 16
(4) 4

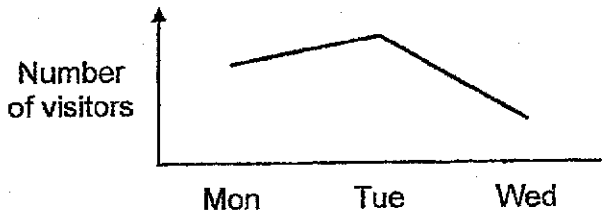
(Go on to the next page)

10 The number of visitors to the Bird Park increased by 200 from Monday to Tuesday and decreased by 600 from Tuesday to Wednesday. Which graph shows the number of visitors at the Bird Park from Monday to Wednesday?

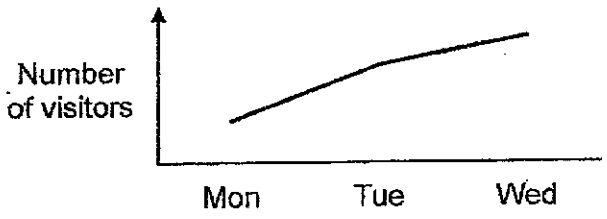
(1)



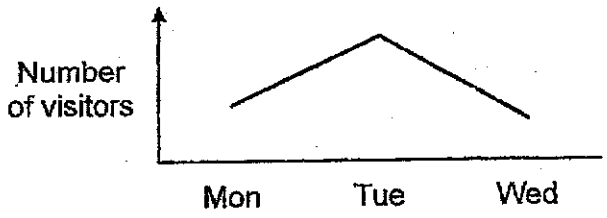
(2)



(3)



(4)



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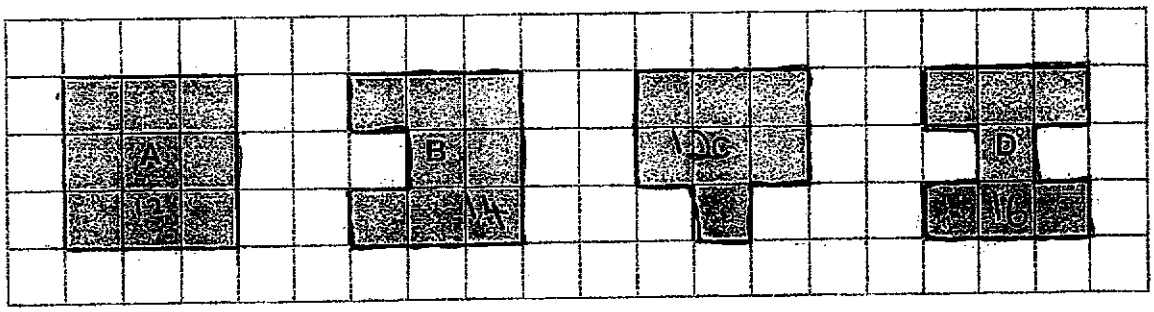
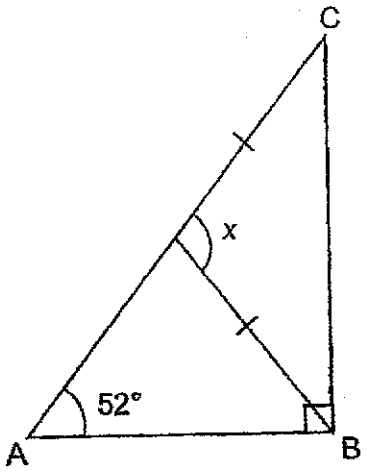
11 Which figure has the largest perimeter?



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

12 In the triangle ABC below, $\angle$ CAB is 52°, find the value of $\angle x$.



(1) 38°
(2) 97°
(3) 104°
(4) 128°

(Go on to the next page)

13 Mrs Tan baked a total of 60 pies and tarts in the morning. There were 3 times as many pies as tarts. After 21 pies and some tarts were sold, there were 4 times as many pies as tarts left. How many tarts were sold?

(1) 6
(2) 7
(3) 8
(4) 9

14 5 boys were given 4 stamps each and 3 girls were given a total of 12 stamps. What was the average number of stamps each child received?

(1) 7
(2) 2
(3) 8
(4) 4

15 David and Tom shared a packet of sweets. David received 15 more than $\frac{3}{8}$ of the total number of sweets. Tom received the remaining 25 sweets. How many sweets were there in the packet altogether?

(1) 16
(2) 40
(3) 64
(4) 160

(Go on to Booklet B)

METHODIST GIRLS' SCHOOL (PRIMARY)

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END-OF-YEAR EXAMINATION 2024
PRIMARY 5
MATHEMATICS

PAPER 1
BOOKLET B

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.

Name: _____ ( )

Class: Primary 5._____

Date: 24 October 2024

25

This booklet consists of 9 printed pages including this page.

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 What is the missing number in the number pattern below?

75, 61, 47, 33, [?], 5

Ans: _____

17 Find the value of $\frac{4}{5} \times \frac{2}{7}$.

Ans: _____

(Go on to the next page)

Do not write in this space

18 Find the value of $1 - \frac{1}{3} - \frac{2}{5}$.

Ans: _____

19 Express $\frac{5}{8}$ as a decimal.

Ans: _____

20 Arrange these distances from the shortest to the longest.

1.35 km	,	$1\frac{3}{5}$ km	,	1 km 305 m

Ans: _____ , _____ , _____

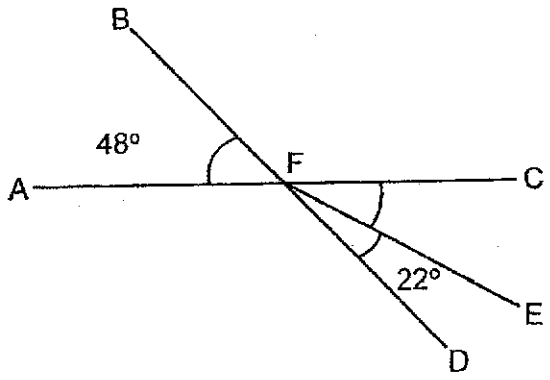
(shortest) (longest)

(Go on to the next page)

Questions **21** to **30** carry 2 marks each. Show your working clearly and write your answers in the space provided. For questions which require units, give your answers in the units stated. (20 marks)

Do not write in this space

21 In the figure, AFC and BFD are straight lines. Find ∠CFE.



Ans: _____ °

22 6000 ml of water was poured into 5 containers equally.
How many litres of water were there in one container?

Ans: _____ ℓ

(Go on to the next page)

Do not write in this space

23 **(a)** Gopal listed the factors of 36 below.

1, 2, 3, 4, 6, 18, 36

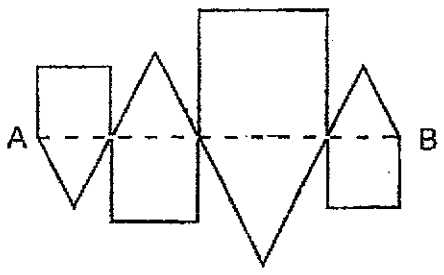
He missed out two factors. What were the two missing factors?

Ans: (a) _____

(b) Write down all the common factors of 20 and 32.

Ans: (b) _____

24 The figure below is formed using 4 squares and 4 equilateral triangles.
The length of the straight line AB is 20 cm.
Find the perimeter of the figure.



Ans: _____ cm

(Go on to the next page)

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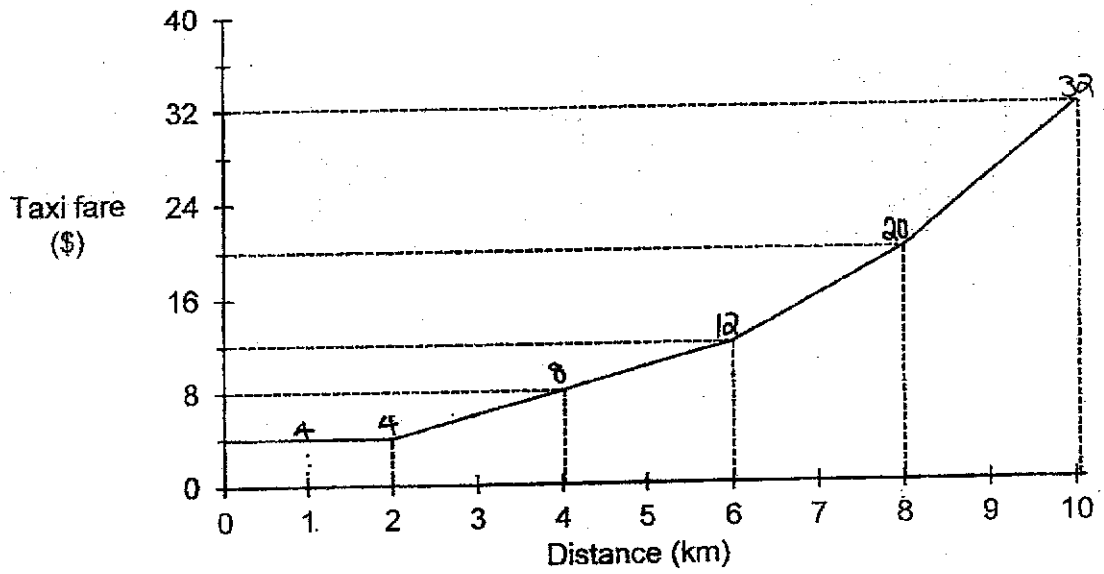
25 The graph shows the fare a taxi company charges for the first 10 kilometres.



(a) How much is the taxi fare for the first kilometre?

Ans: (a) $ _____

(b) Alan paid $20 for his taxi ride. What was the distance he travelled?

Ans: (b) _____ km

(Go on to the next page)

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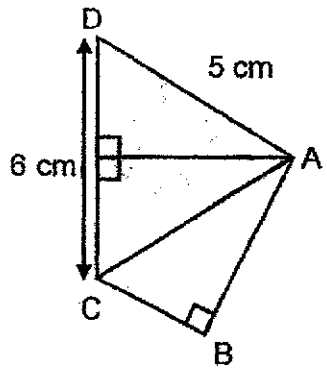
26 The table below shows the local postage rates in Singapore.

Mass Step	Cost
First 30 g	$0.30
Next 50 g	$0.50
Every additional 40 g or less	$0.60

Mr Lim needs to send a parcel that weighs 138 g.
How much does he need to pay?

Ans: $ _____

27 Ken cut out three identical right-angled triangles. He joined them to form a figure ABCD as shown below. CD = 6 cm and AD = 5 cm. The perimeter of the figure is 18 cm. Find the area of the figure ABCD.



Ans: _____ cm^2

(Go on to the next page)

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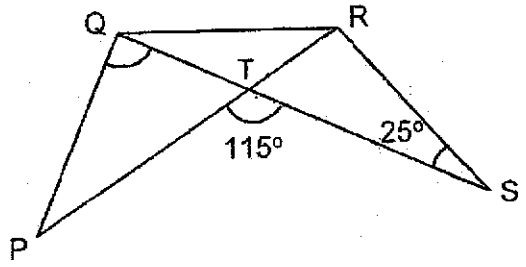
28 In the figure, QTS and PTR are straight lines. PQ = QR = RS. $\angle PTS = 115°$ and $\angle RST = 25°$. Find $\angle PQT$.



Ans: _____

29 Three friends shared the total cost of 48 apples in the ratio 5 : 2 : 1. What was the cost for the largest share?

12 apples for $10

Ans: $ _____

(Go on to the next page)

30 Mary had a new bottle of fish food. She feeds an equal amount of fish food to her fishes each day. At the end of the 18th day, $\frac{1}{7}$ of the bottle was left. At the end of the 19th day, the amount of food left was 200 g. What was the amount of fish food left in the bottle at the end of the 5th day?

Do not write in this space

Ans: _____ g

END OF PAPER

METHODIST GIRLS' SCHOOL (PRIMARY)

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END OF YEAR EXAMINATION 2024
PRIMARY 5
MATHEMATICS

PAPER 2

Duration: 1 h 30 min

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.

Name: _____ ( )

Class: Primary 5. _____

Date : 24 October 2024

Parent's Signature: _____

Paper 1 Booklet A	**/ 20**
Paper 1 Booklet B	**/ 25**
Paper 2	**/ 55**
TOTAL	**/ 100**

This booklet consists of 17 printed pages including this page.

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 usual price of a watch was $780. During a sale, it was sold at 20% discount. How much was the discount?

Ans: $ _____

2 Daniel, Ivan and Sean shared 456 marbles in the ratio of 12 : 5 : 2. What was the total number of marbles Ivan and Sean had?

Ans: _____

(Go on to the next page)

3 In the figure, VWXZ is a square. XYZ is an equilateral triangle. Find ∠WZY.

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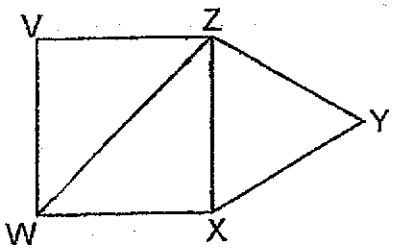
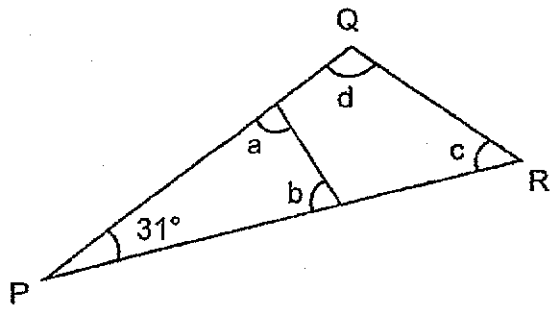


Ans: _____ °

4 PQR is a triangle. Find the sum of angles a, b, c and d.



Ans: _____ °

(Go on to the next page)

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5 Mr and Mrs Soh had different amounts of money.

Mr Soh gave $\frac{1}{4}$ of his money to Abel.

Mrs Soh gave $\frac{1}{2}$ of her money to Betsy.

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.

	Statement	True	False	Not possible to tell
(a)	Abel and Betsy received $\frac{3}{4}$ of the total amount money Mr and Mrs Soh had.			
(b)	Abel and Betsy received the same amount of money from Mr and Mrs Soh.			

(Go on to the next page)

For questions to **6** to **17**, show your workings 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 Ali and Eva had the same amount of money at first.
Later on, Ali received another $550 and Eva spent $260.
Ali had 4 times as much money as Eva in the end.
How much money did each of them have at first?

Ans: _____ [3]

(Go on to the next page)

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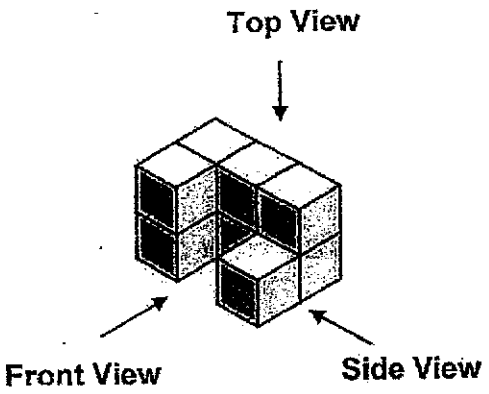
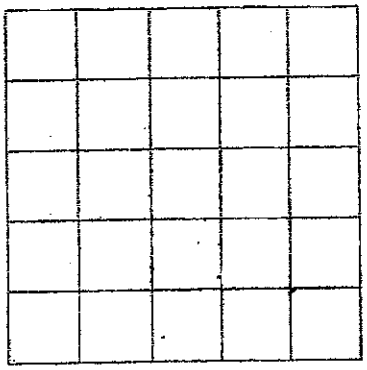
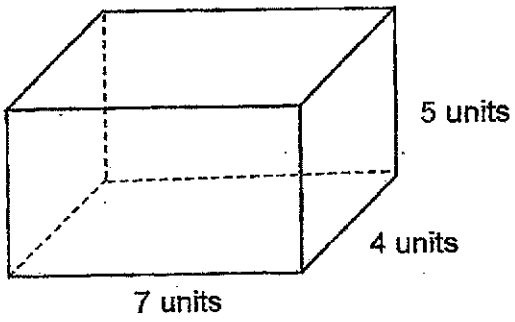
7 John built the solid shown below. It is made up of 9 unit cubes.

(a) Draw the top view (from the front) in the square grid. [1]





(b) John placed the solid into the rectangular box as shown below. Then, he packed the box full by adding more unit cubes.



What is the smallest number of unit cubes that John added into the box?

Ans: _____ [2]

8 Mrs Lim worked as a sales promoter from February to May.
The table below shows the number of pots she sold.

Month	Number of Pots Sold
Feb	58
Mar	47
Apr	69
May	?

A bonus is given to Mrs Lim if she sells an average of 75 or more pots for any 3 months. What is the least number of pots that she must sell in May to qualify for the bonus?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

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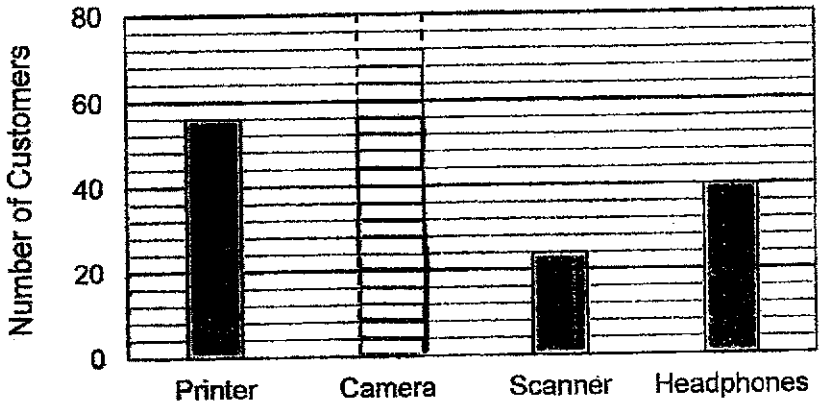
9 Customers who purchased a laptop at a computer fair received a free item each. They could choose from a printer, a camera, a scanner, or a pair of headphones. The bar graph below shows the choices. The bar for customers who chose cameras is not shown.



(a) What is the ratio of the number of customers who chose printers to the number of customers who chose scanners?
Give your answer in the simplest form.

Ans: (a) _____ [1]

(b) $\frac{3}{8}$ of the customers chose the cameras as their free gifts.
How many customers chose cameras?
Do your working below and draw the bar in the graph to show the number of customers who chose cameras.

Ans: (b) _____ [2]

(Go on to the next page)

10 Mary and Nancy had 540 stickers. Mary gave $\frac{2}{5}$ of her stickers to Nancy.

Then, Nancy gave $\frac{1}{4}$ of her total number of stickers to Mary.

In the end, they had an equal number of stickers.
How many stickers did Mary give to Nancy?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

11 A rectangular tank was $\frac{3}{5}$ filled with water at first. Nathan poured some water from the rectangular tank into a 20-cm cubical tank and filled it completely.

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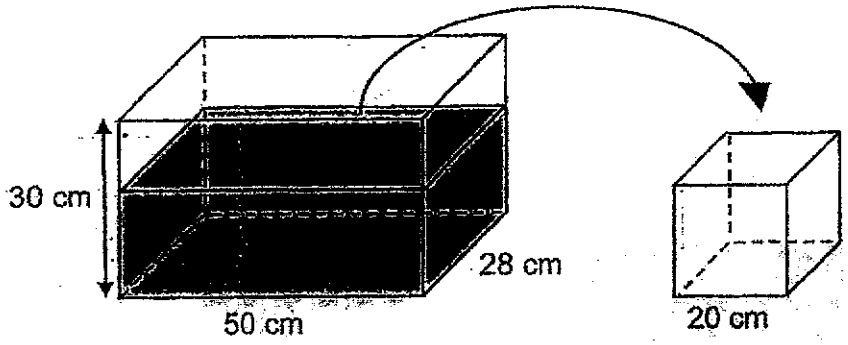
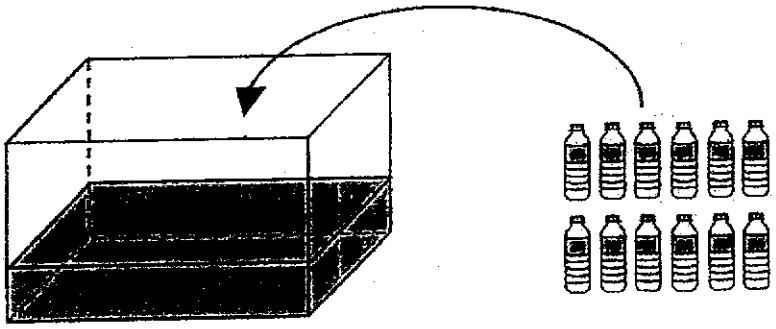


(a) How much water was left in the rectangular tank?

Ans: (a) _____ [2]

(Go on to the next page)

(b) Then, he filled 12 identical bottles to the brim with water and poured all the water from the 12 bottles into the rectangular tank.
There was 31 litres of water in the rectangular tank in the end.
What is the capacity of each bottle? Give your answer in litres.



Ans: (b) _____ [3]

(Go on to the next page)

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12 At a concert, $\frac{4}{9}$ of the audience were adults. $\frac{3}{4}$ of the children were boys.

(a) What fraction of the audience were girls?

Ans: (a) _____ [2]

(b) There were 350 more boys than girls.
How many people were there at the concert?

Ans: (b) _____ [2]

(Go on to the next page)

13 In the figure below, Point C is on line DE. $\angle ABE = 81°$ and $\angle BED = 27°$.

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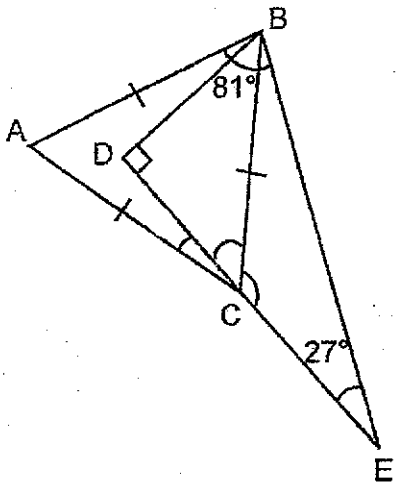

(a) Find $\angle BCE$

Ans: (a) _____ [2]

(b) Find $\angle ACD$.

Ans: (b) _____ [2]

(Go on to the next page)

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14 The total cost of a dress and a skirt was $239.
Mrs Chen wanted to buy the dress but she was short of $40.
In the end, she bought the skirt and had $25 left.

(a) How much more did the dress cost than the skirt?

Ans: (a) _____ [2]

(b) How much money did Mrs Chen have at first?

Ans: (b) _____ [2]

(Go on to the next page)

15 The figure below shows 2 overlapping identical squares in Rectangle WXYZ. The area of Rectangle WXYZ is 768 cm^2.

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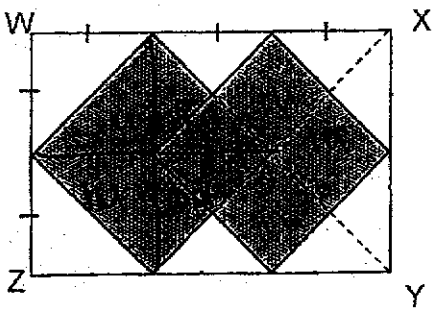


(a) What fraction of the Rectangle WXYZ is **unshaded**? Give your answer in the simplest form.

Ans: (a) _____

(b) What is the perimeter of the shaded part?

Ans: (b) _____ [3]

16 Amy had a number of 50-cent coins and 20-cent coins in the ratio of 5 : 4. After she removed $\frac{1}{2}$ of the 50-cent coins, the total number of coins was reduced to 208.

Do not write in this space

(a) How many of each type of coins did Amy have in the end?

Ans: (a) 50-cent coins: _____

20-cent coins: _____ [2]

(b) What was the total value of the coins in the end?

Ans: (b) _____ [2]

17 Sunshine factory was required to produce 2160 toys.
The factory owned Machine A which produces 3 toys per minute.

Do not write in this space

(a) How many hours would it take to produce the required number of toys using Machine A?

Ans: (a) _____ [2]

(b) To shorten production time, Machine B was purchased. It produces 7 toys every 3 minutes. With Machine A and B being used at the same time, how much time would the company save to produce the same number of toys? Give your answer in hours.

Ans: (b) _____ [3]

END OF PAPER

METHODIST GIRLS' SCHOOL (PRIMARY)
2024 EOY Primary 5 Standard Mathematics
Answer Key

Paper 1 - Booklet A (20 marks)

Questions 1 to 10 1 mark each	
Question	Answer
1.	2
2.	2
3.	3
4.	4
5.	3
6.	3
7.	2
8.	2
9.	2
10.	2

Questions 11 to 15 2 marks each	
Question	Answer
11.	4
12.	3
13.	4
14.	4
15.	3

Paper 1 - Booklet B (25 marks)

Questions 16 to 20 – 1 mark each

Question	Answer	
16.	19	
17.	$\frac{8}{35}$	Accept Equivalent
18.	$\frac{4}{15}$	Accept Equivalent
19.	0.625	Method 1: By long division, 5 ÷ 8 = 0.625 Method 2: $\frac{5}{8} = \frac{625}{1000}$ = 625 ÷ 1000 = 0.625

20.	1 km 305 m, 1.35 km, $1\frac{3}{5}$ km,	1.35 km = 1350 m $1\frac{3}{5}$ km = 1600 m 1 km 305 m = 1305 m

Questions 21 to 30 – 2 marks each

Qns	Answer	
Q21	26	Method 1: ∠CFE = 48° – 22° = 26° Method 2: ∠BFC = 180° – 48° = 132° ∠CFE = 180° – 132° – 22° = 26°
Q22	1.2	Method 1 Volume in each container = 6000 ml ÷ 5 = 1200 ml = 1.2 ℓ Method 2 6000 ml = 6 ℓ Volume in each container = 6 ℓ ÷ 5 = 1.2 ℓ
Q23	a) 9, 12 b) 1, 2, 4	(a) Factors of 36 = 1, 2, 3, 4, 6, 9, 12, 18, 36 Missing factor = 9 and 12 (b) Factors of 20 = 1, 2, 4, 5, 10, 20 Common factors = 1, 2, 4
Q24	100	Perimeter = 20 cm x 5 = 100 cm
Q25	a) 4 b) 8	Read off graph given.

Qns	Answer	
Q26	2	Amount that he has to pay = $0.30 + $0.50 + $0.60 + $0.60 = **$2.00**
Q27	18	AB = 18 cm – 6 cm – 5 cm – 3 cm = 4 cm Area of 1 triangle $= \frac{1}{2} \times 4\text{ cm} \times 3\text{ cm}$ = 6 cm² Area of figure (3 congruent triangles) = 6 x 3 cm² OR $3 \times \frac{1}{2} \times 4\text{ cm} \times 3\text{ cm}$ = **18 cm²**
Q28	75	Method 1 ∠QRT = 180° – 115° – 25° = 40° ∠PQT = 180° – 40° – 40° – 25° = 75° Method 2 ∠QRT = 180° – 115° – 25° = 40° ∠QTP = 180° – 115 = 65° ∠PQT = 180° – 40° – 65 = 75° ——A1
Q29	26	Method 1 48 apples → $10 x 4 = $40 8u = $40 1u = $5 5u = $5 x 5 = **$25** Method 2 1u = 48 ÷ 8 = 6 apples 6 apples → $10 ÷ 2 = $5 5u = $5 x 5 = **$25**

Qns	Answer	
Q30	1600	$\frac{6}{7}$ of bottle → 18 days $\frac{1}{7}$ of bottle → 3 days Whole Bottle → 3 x 7 = 21 days 2 days → 200 g 1 day → 100 g 5th day → 5 x 100 g = 500 g 21 days → 2100 g Amount left = 2100g – 500g = **1600 g** Or 21 – 5 = 16 16 days → = 16 x 100g = **1600 g**

Paper 2 (56 marks)

Q1 to 5 (2 marks each)

Qns	Answer	
1	$156	Method 1: Discount amount $= \frac{20}{100} \times \$780$ or $\frac{\$780}{100} \times 20$ = $156 Method 2: 100% ⟶ $780 80% ⟶ $\frac{80}{100} \times \$780$ = $624 (discounted price) Discount amount = $780 – $624 = $156

2 — 168

D	:	I	:	S	:	Total	:	I + S
12	:	5	:	2	:	19	:	7
288	:	120	:	48	:	456	:	168

Method 1:
Total number of marbles that Ivan and Sean had
= 120 + 48
= **168**

Method 2:
19 u = 456
$7u = \frac{456}{19} \times 7$
= 168

3 — 105°

$\angle WZX = (180° - 90°) \div 2$
$= 45°$
$\angle WZY = 45° + 60°$
= **105°**

4 — 298°

Method 1:
$\angle a + \angle b + \angle c + \angle d$
$= 2 \times 180° - 2 \times 31°$
= **298°**

Method 2:
$\angle a + \angle b + \angle c + \angle d$
$= (180° - 31°) \times 2$
= **298°**

5 — (a) False

(b) Not possible to tell

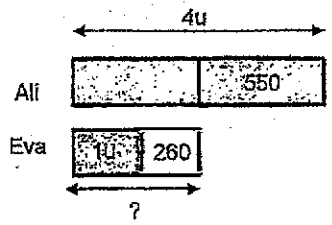
	Statement	True	False	Not possible to tell
(a)	Abel and Betsy had $\frac{3}{4}$ of the total amount money Mr and Mrs Chong had.		✓	
(b)	Abel and Betsy received the same amount of money from Mr and Mrs Soh.			✓

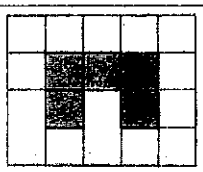
Explanation
(a) Fractions cannot be added as the set of money Mr and Mrs Soh had was different. FALSE.

(b) 3 possible scenarios, NOT POSSIBLE TO TELL

Scenario	1	2	3
	Mr Soh had twice as much money as Mrs Soh Example A Mr Soh - 4u Mrs Soh - 2u	Mr Soh had more money than Mrs Soh (exclude Scenario 1) Example / B1 / B2 Mr Soh / 3u / 8u Mrs Soh / 2u / 2u	Mr Soh had less money than Mrs Soh Example C Mr Soh - 2u Mrs Soh - 4u
Abel	$\frac{1}{4} \times 4u = 1u$	B1: $\frac{1}{4} \times 3u = \frac{3}{4}u$ B2: $\frac{1}{4} \times 8u = 2u$	$\frac{1}{4} \times 2u = \frac{1}{2}u$
Betsy	$\frac{1}{2} \times 2u = 1u$	B1/2: $\frac{1}{2} \times 2u = 1u$	$\frac{1}{2} \times 4u = 2u$
Statement	True	False	False

Q6 to 17 (45 marks)

Qns	Answer	
6.	**$530**	Method 1:  3u = $260 + $550 = $810 1 unit = $810 ÷ 3 = $270 Amount of money each of them had at first = $270 + $260 = $530 Method 2: 1u + 550 = 4p 1u – 260 = 1p 4u – 1040 = 4p 4u – 1040 = 1u + 550 3u = 1590 1u = 1590 ÷ 3 = 530 Amount of money each of them had at first = $530

7.	**(a) See shaded figure on the right** **(b)131**	(a)  (b) Total number of unit cubes in box = 7 × 4 x 5 = 140 Least number of cubes that John added = 140 – 9 = **131**
8.	**98**	Method 1 Total number of pots = 75 × 3 = 225 Least number of pots sold in May = 225 – (58 + 69) = **98** Method 2 Number of pots short in Feb = 75 - 58 = 17 Number of pots short in Apr = 75 – 69 = 6 Least number of pots needed to get bonus = 75 + 17 + 6 = **98**

9. (a) 7:3

(a) Ratio = 56:24
= 7:3

(b) 72

(b) Method 1

$\frac{5}{8}$ of customers
= 56 + 24 + 40
= 120

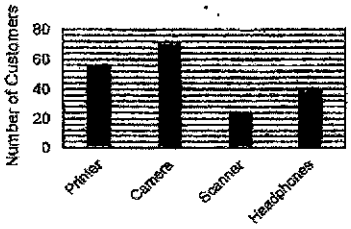
$\frac{3}{8}$ of customers
= $\frac{120}{5} \times 3$
= 72

Method 2

$\frac{5}{8}$ of customers
= 14u + 6u + 10u
= 30u

$\frac{3}{8}$ of customers
= $\frac{30u}{5} \times 3$
= 18u

18u = 18 × 4
= 72



10. 120

No. of stickers each has in the end
= 360 + 2
= 270

Method 1:

Mary	Nancy
180/3 x 6 = 360	540 – 360 = 240
[illegible]	[illegible]
540 – 360 = 180 (3p)	270/3 x 4 = 360 — M1
[illegible]	[illegible]
270	270 (3u)

No. of stickers Mary gave to Nancy
= 360 – 180 or 360 – 240
= 120

Method 2:

$\frac{3}{5}$ to Mary's stickers at first
= 270 + (270 ÷ 3)
= 180
No. of stickers given to Nancy
= $\frac{180}{3} \times 2$
= 120

Method 3:

No. of stickers Nancy had after Mary gave her $\frac{2}{5}$ of her money
= $\frac{270}{3} \times 5$
= 360
$\frac{3}{5}$ of Mary's stickers at first
= 540 – 360
= 180
No. of stickers given to Nancy
= $\frac{180}{3} \times 2$
= 120

00 = 240
[illegible]
4 = 360 — M1
[illegible]
)

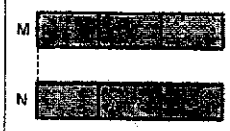
: her $\frac{2}{5}$ of her money

= 540 – 360
= 180
No. of stickers given to Nancy
= $\frac{180}{3} \times 2$
= 120

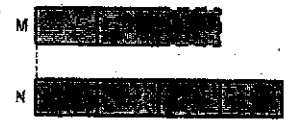
5

Method 4:

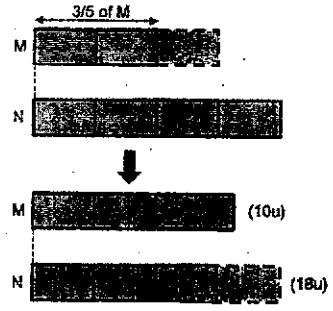
In the end:



Before Nancy gave ⅛ to Mary:



Before Mary gave 2/5 to Nancy:



18u = 540

$4u = \frac{540}{18} \times 4$

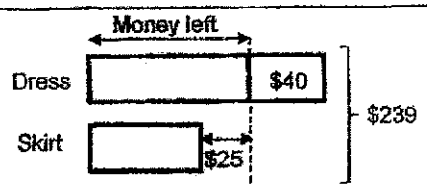
= 120

Mary gave Nancy 120 stickers.

11.	(a) 17 200 cm³/ 17 200 ml/ 17.2ℓ (b) 1.16ℓ	(a) Vol. of water in tank at first $= \frac{3}{5} \times 50\text{ cm} \times 28\text{ cm} \times 30\text{ cm}$ = 25 200 cm³ Vol. of cubical tank = 20 cm x 20 cm x 20 cm = 8000 cm³ Volume of water left in rect tank = 25 200 cm³ - 8000 cm³ = 17 200 cm³ / 17 200 ml / 17.2 ℓ (b) Volume of 12 bottles = 31ℓ -17.2ℓ = 13.8ℓ Capacity of each bottle = 13.8ℓ ÷12 = 1.15ℓ
12.	(a) $\frac{5}{36}$ (b) 1260	(a) Method 1 Fraction of audience who are girls $= \frac{1}{4} \times \frac{5}{9}$ $= \frac{5}{36}$ Method 2 (Ratio) A : C : B : G : Total 4 : 5 16 : 20 : 36 4 : 3 : 1 20 : 15 : 5 : M1 Fraction of audience who are girls $= \frac{5}{36}$

6

		(b) Method 1 Fraction of boys more than girl $= \frac{1}{2} \times \frac{5}{9}$ OR $(\frac{3}{4} \times \frac{5}{9}) - (\frac{1}{4} \times \frac{5}{9})$ $= \frac{5}{18}$ $\frac{5}{18}$ of audience = 360 All of audience = $\frac{360}{5} \times 18$ = **1260** Method 2 Total number of children = (350 ÷ 2) × 4 = 700 5u = 700 1u = 700 ÷ 5 = 140 9u = 140 × 9 = **1260** Method 3 (Ratio) 10u = 350 1u = 350 ÷ 10 = 35 36u = 36 × 35 = **1260**
13.	(a) 132° (b) 12°	(a) ∠CBE = 81° - 60 = 21° ∠BCE = 180° - (27° + 21°) = 132° (b) ∠BCD = 180° - 132° = 48° ∠ACD = 60° - 48° = 12°

14.	(a)$65 (b)$112	(a)  Difference in cost of dress and skirt = $40 + $25 = $65 (b) Method 1 Cost of skirt = ($239 - $65) ÷ 2 = $87 Amount of money at first = $87 + $25 = $112 Method 2 Cost of dress = ($239 + $65) ÷ 2 = $152 Amount of money at first = $152 - $40 = $112

15.	**(a)** $\frac{5}{12}$ **(b) 96 cm**	(a) $\frac{5}{12}$ (b) Method 1 Area of each small square = 768 cm² ÷ 12 = 64 cm² 8 cm x 8 cm = 64 cm² Length of 1 side of square = 8 cm Perimeter of shaded figure = 12 × 8 cm = 96 cm Method 2 Area of shaded figure $= \frac{7}{12}$ x 768 cm² = 448 cm² Area of 1 big square $= \frac{4}{7}$ x 448 cm² = 256 cm² 16 cm x 16 cm = 256 cm² Length of 1 side of square = 16 cm Perimeter of the shaded figure = 6 x 16cm = 96 cm

16.	**(a) 50-cent coins: 80** **20-cent coins: 128** **(b) $65.60**	(a) 50-cent coins : 20-cent coins Method 1 Before 5 : 4 After 2.5 : 4 Method 2 Before 5 : 4 10 : 8 After 5 : 8 Method 1: 2.5u + 4u = 208 1u = 208 ÷ 6.5 = 32 No. of 50-cent coins = 2.5u = 2.5 x 32 = 80 No. of 20-cent coins = 4u = 4 x 32 = 128 Method 2: 5u + 8u = 208 1u = 208 ÷ 13 = 16 No. of 50-cent coins = 5u = 5 × 16 = 80 No. of 20-cent coins = 8u = 8 × 16 = 128 (b) Total value of coins = (80 x $0.50) + (128 x $0.20) = $40 + $25.60 = $65.60

17.	(a)12 h (b) $6\frac{1}{4}$ h	(a) Method 1: 1 min → 3 toys 60 min → 60 x 3 toys = 180 toys No. of hours taken by Machine A = 2160 ÷ 180 = 12 hours Method 2: 3 toys → 1 min 2160 toys → (2160 ÷ 3) min = 720 min = 12 hours (b) Method 1 Machine B: 3 min → 7 toys 60 min → 7 toys × 20 = 140 toys Total number of toys in 1 hour by Machines A & B = 180 + 140 = 320 1 h → 320 toys Total time taken by Machines A & B = 2160 ÷ 320 = $6\frac{3}{4}$ hours No. of hours saved = 12 hours – $6\frac{3}{4}$ hours = $5\frac{1}{4}$ hours

		Method 2 Total no. of toys produced every 3 min = 7 + 9 = 16 toys Machine A and B used at same time 2160 ÷ 16 = 135 sets Total time taken by Machines A & B = 135 x 3 min = 405 min = $6\frac{3}{4}$ h No. of hours saved = 12 hours - $6\frac{3}{4}$ hours = $5\frac{1}{4}$ hours

9
END