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)

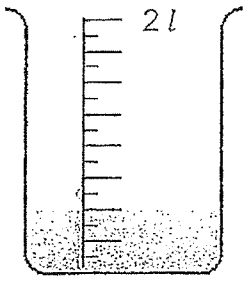
4 Express $\frac{1}{2}$ % as a decimal.

(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?



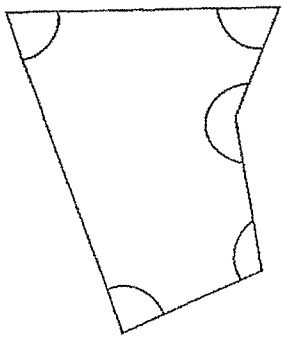
(1) 200 ml
(2) 400 ml
(3) 500 ml
(4) 800 ml

(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

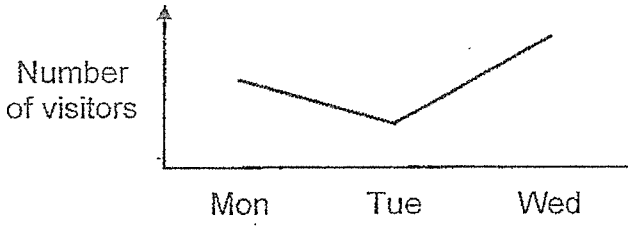
9 What is the value of $18 - (4 + 8) \div 3 \times 2$?

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

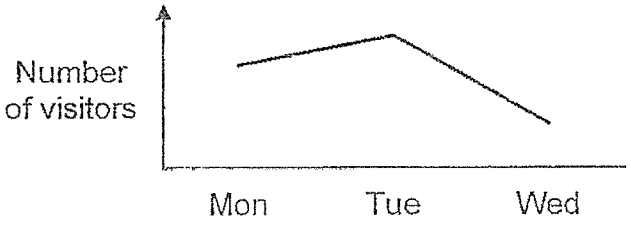
(Go on to the next page)

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?

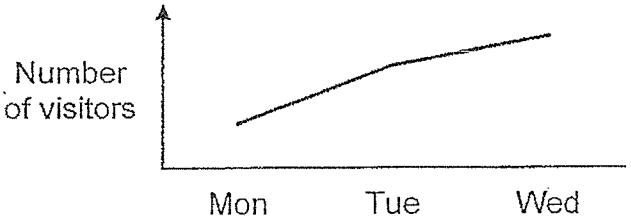
(1)



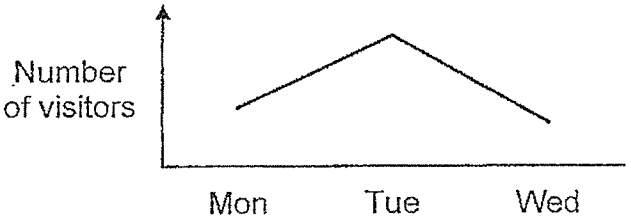
(2)



(3)

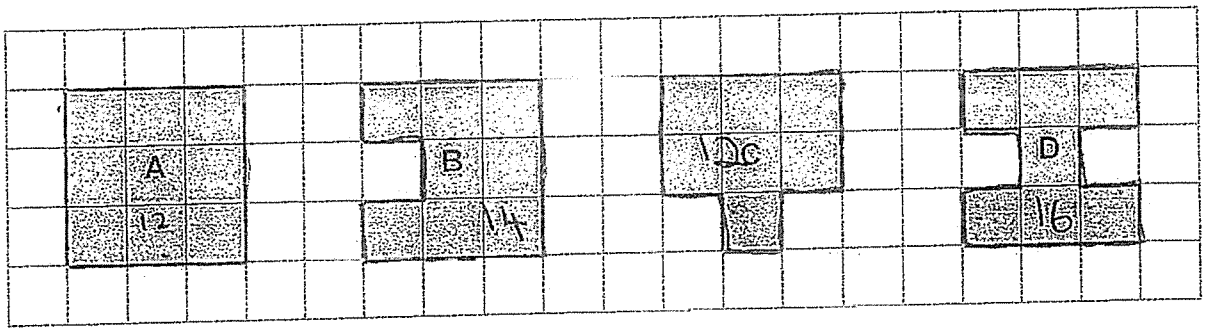


(4)



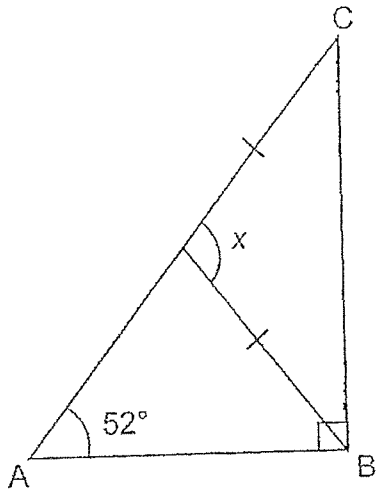
(Go on to the next page)

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)

Founded in 1887

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: _____ , _____ , _____

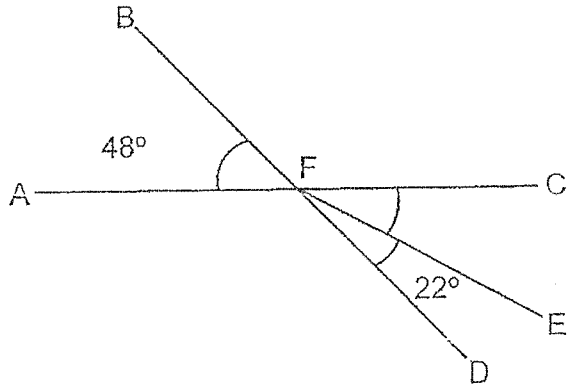
(shortest) (longest)

(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

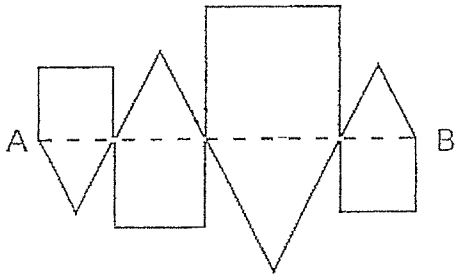
He missed out two factors. What were the two missing factors?

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.

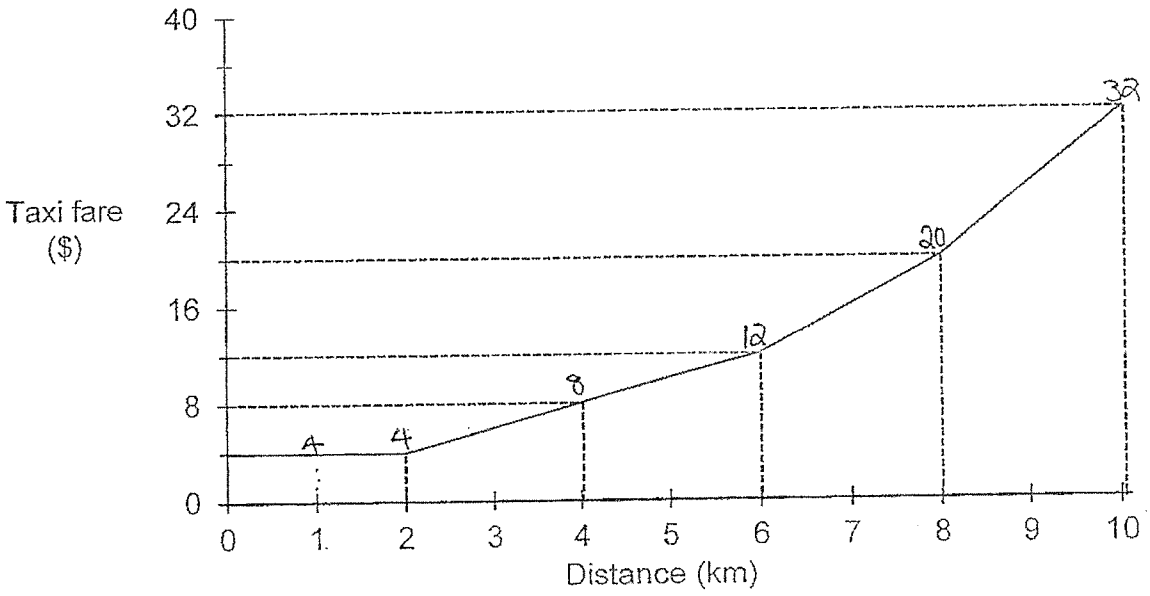


Ans: _____ cm

(Go on to the next page)

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

Do not write in this space



(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)

Do not write in this space

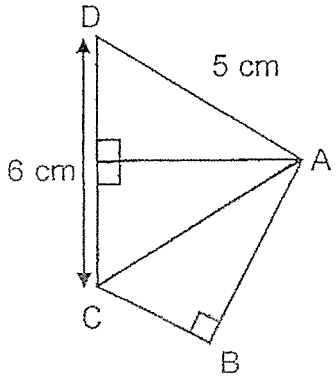
26 The table below shows the local postage rates in Singapore.

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.

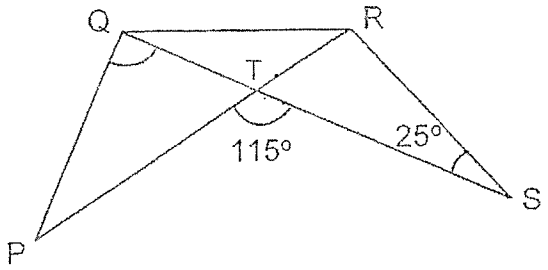


Ans: _____ cm^2

(Go on to the next page)

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

Do not write in this space



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)

Founded in 1887

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?

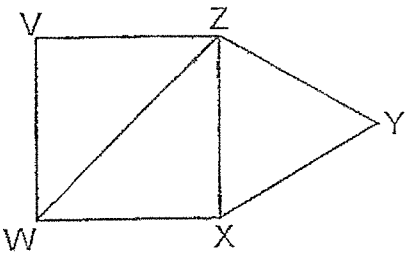
Ans: $ _____

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)

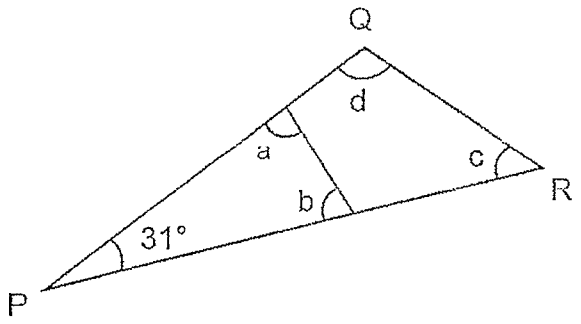
3 In the figure, VWXZ is a square. XYZ is an equilateral triangle. Find ∠WZY.



Do not write in this space

Ans: _____ °

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



Ans: _____ °

(Go on to the next page)

Do not write in this space

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?

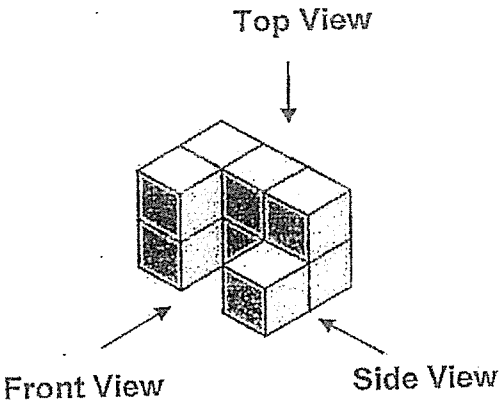
Ans: _____ [3]

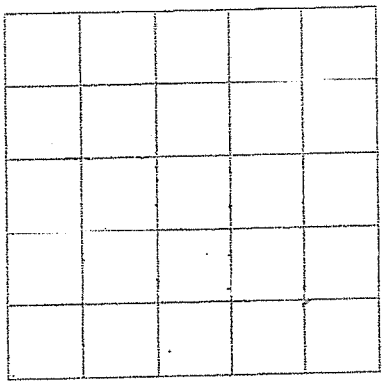
(Go on to the next page)

Do not write in this space

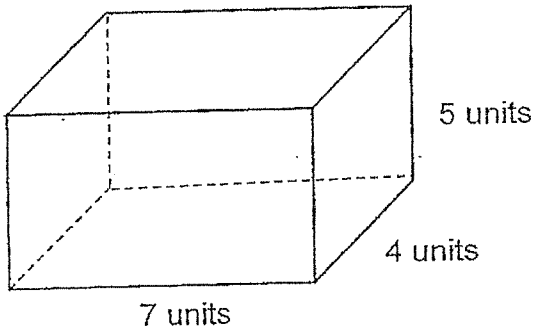
7 John built the solid shown below. It is made up of 9 unit cubes.

(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]

(Go on to the next page)

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

Do not write in this space

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

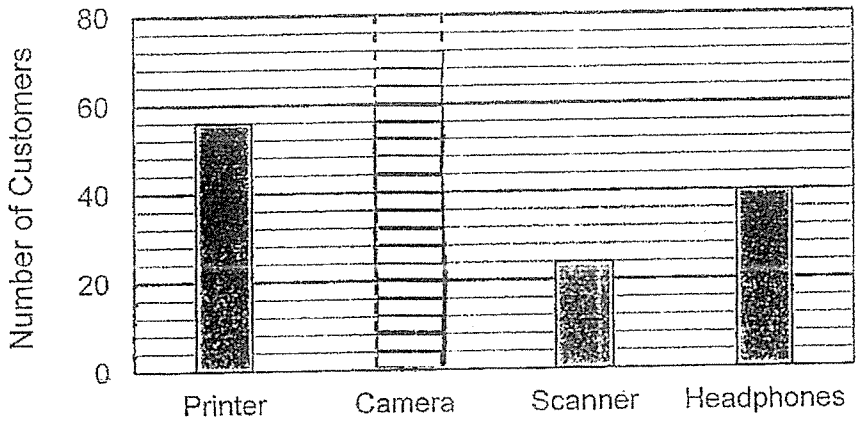
A bonus is given to Mrs Lim if she sells an average of 75 or more pots for any 3 months. What is the least number of pots that she must sell in May to qualify for the bonus?

Ans: _____ [3]

(Go on to the next page)

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.

Do not write in this space



(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?

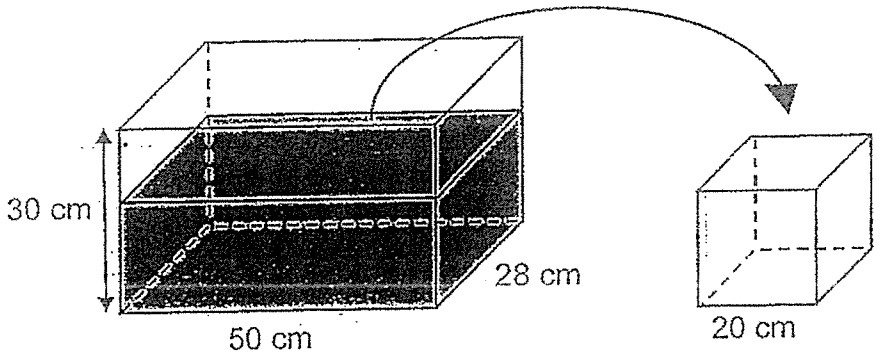
Do not write in this space

Ans: _____ [3]

(Go on to the next page)

Do not write in this space

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.

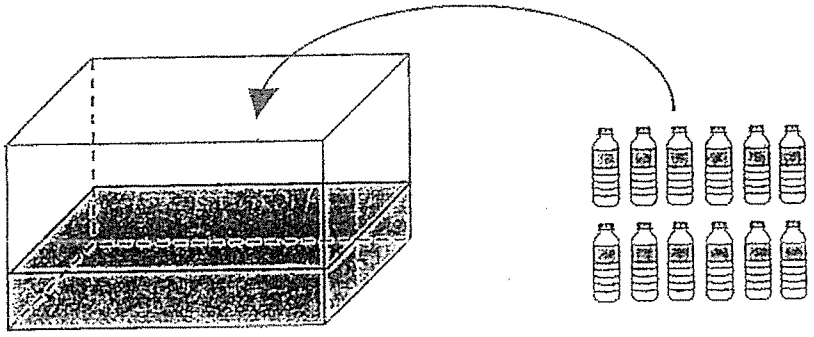


(a) How much water was left in the rectangular tank?

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)

Do not write in this space

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]

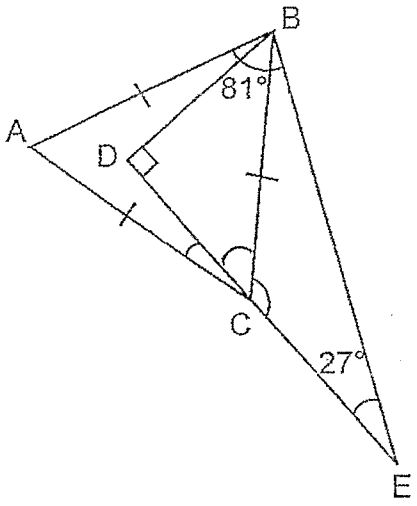
(b) There were 350 more boys than girls.
How many people were there at the concert?

Ans: (b) _____ [2]

(Go on to the next page)

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

Do not write in this space



(a) Find $\angle BCE$

Ans: (a) _____ [2]

(b) Find $\angle ACD$.

Ans: (b) _____ [2]

(Go on to the next page)

Do not write in this space

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]

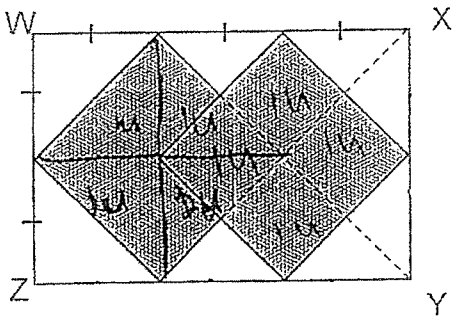
(b) How much money did Mrs Chen have at first?

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.

Do not write in this space



(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]

(Go on to the next page)

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]

Do not write in this space

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

(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

SCHOOL : METHODIST GIRLS' SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATHEMATICS
TERM : 2024 END OF YEAR EXAMINATION

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

16	19
17	$\frac{8}{35}$
18	$\frac{4}{15}$
19	0.625
20	1km 305m, 1.35km, $1\frac{3}{5}$ km
21	Method 1: $\angle$CFE = 48°–22° = 26° Method 2: $\angle$BPC = 180°–48° = 132° $\angle$CFE = 180°–132°–22° = 26°
22	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
23	(a) Factors of 36 = 1, 2, 3, 4, 6, 9, 12, 18, 38 Missing factor = 9 and 12 (b) Factors of 20 = 1, 2, 4, 5, 10, 20 Common factors = 1, 2, 4
24	Perimeter = 20 cm x 5 = 100 cm
25	a) 4

	b) 8
26	Amount that he has to pay = \$0.3 + 0.5 + 0.6 + 0.6 = \$2
27	AB = 18 – 6 – 5 – 5 – 3 =4cm Area of 1 triangle $= \frac{1}{2} \times 4 \times 3$ = 6 cm^2 Area of 3 figure (3 congruent triangles) = 6 x 3 OR $3 \times \frac{1}{2} \times 4 \times 3$ = 18 cm^2
28	Method 1: $\angle QRT = 180 - 115 - 25 = 40°$ $\angle PQT = 180 - 40 - 40 - 25 = 75°$ Method 2: $\angle QRT = 180 - 115 - 25 = 40°$ $\angle QTP = 180 - 115 = 65°$ $\angle PQT = 180 - 40 - 65 = 75°$
29	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

30	$\frac{6}{7}$ of bottles → 18 days $\frac{1}{7}$ of bottles → 3 days Whole bottle → 3 x 7 = 21 days 2 days → 200g 1 days → 100g 5th day → 5 x 100g = 500g 21 days → 2100g Amount left = 2100 – 500g = 1600g OR 21- 5 = 16 16 days → 16 x 100g = 1600g

PAPER 2

1	Method 1: Discount amount = $\frac{20}{100}$ x $\$780$ = $156 Method 2: 100% → $780 80% → $\frac{80}{100}$ x $780 =$624 (discounted price) Discounted amount = 780 – 624 = $156
2	Method 1: Total number of marbles that Ivan and Sean had = 120 + 48 = 168 Method 2: 19u = 456 7u = 456/19 x7 = 168
3	∠WZX = (180 -90) ÷ 2 = 45° $\angle WZY = 45 + 60 = 105°$
4	Method 1: $\angle a + \angle b + \angle c + \angle d$ = 2 x 180 – 2 x 31 =298° Method 2: $\angle a + \angle b + \angle c + \angle d$ = (180 -31) x 2 =298°

5

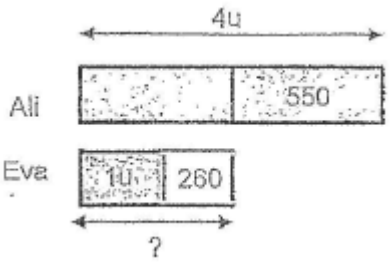
a) False

b) Not possible to tell

(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

6



3u = 260 + 550 = $810

1u = 810 ÷ 3 = 270

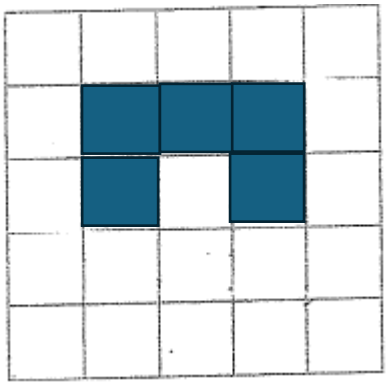
Amount of money each of them had at first

= 270 + 260

= $530

7

a)



b)

Total number of unit cubes in box

= 7 x 4 x 5

= 140

Least number of cubes that John added

= 140 – 9

= 131

8	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 February = 75 - 58 = 17 Number of pots short in April = 75 – 69 = 6 Least number of pots needed to get bonus = 75 + 17 + 6 = 98
9	a) Ratio = 56:24 = 7:3 (b) Method 1: $\frac{5}{8}$ of customers = 56 + 24 + 40 = 120 $\frac{3}{8}$ of customers = $\frac{120}{5}$ x 3 = 72 Method 2: $\frac{5}{8}$ of customers = 11u + 6u + 10u = 30u $\frac{3}{8}$ of customers = = $\frac{30u}{5}$ x 3 = 18u 18u = 18 × 4 = 72
10	$\frac{3}{5}$ to Mary's stickers at first = 270 – (270 ÷ 3) = 180

	No of stickers given to Nancy = (180 ÷ 3) x 2 120
11	a) Vol of water in the tank at first = $\frac{3}{5}$ x 50 x 28 x 30 = 25 200 cm^3 Vol of cubical tank = 20 x 20 x 20 = 8000 cm^3 Volume of water left in the rectangle tank = 25200 – 8000 = 17200 cm^3 / 17200ml = 17.2L b) Volume of 12 bottles = 31 – 17.2 =13.8L Capacity of each bottle = 13.8 ÷ 12 = 1.15L
12	a) $\frac{1}{4}$ x $\frac{5}{9}$ = $\frac{5}{36}$ b) 10u = 350 1u = 350 / 10 = 35 36u = 36 x 35 = 1260
13	a) ∠CBE = 81 – 60 = 21° ∠BCE = 180 – (27 + 21) = 132° b) ∠BCD = 180 – 132 = 48° ∠ACD = 60 – 48 = 12°
14	a) Difference in cost of dress and skits = 40 + 25 = $65 b) Cost of skirt = (239 – 65) ÷ 2 = $87 Amount of money at first = 87 + 25 = $112
15	a) $\frac{5}{12}$

	b) Area of each small square = 768 / 12 = 64 cm^2 (8x8=64) Length of 1 side of the square = 8cm Perimeter of shaded figure = 12 x 8 = 96cm
16	2.5u + 4u = 208 1u = 208 / 6.5 = 32 No of 50 cent coins = 2.5u x 32 = 80 No of 20 cent coins = 4u x 32 = 128 b) Total value of coins = (80x 0.5) + (128 x 0.2) = $65.60
17	a) 3 toys -> 1min 2160 toys -> 2160 / 3 = 720min = 12hours b) Machine B: 3 min -> 7 toys 60 min -> (60/3) x 7 = 140 toys Total number of toys in 1 hour by Machine A and B = 180 + 140 = 320 toys Total time taken by Machine A and B = 2160 / 320 = $6\frac{3}{4}$ hours No of hours saved = 12 - $6\frac{3}{4}$ = $5\frac{1}{4}$ hours