

## MARIS STELLA HIGH SCHOOL (PRIMARY) END-YEAR EXAMINATION PRIMARY 5 MATHEMATICS 26 OCTOBER 2023 PAPER 1 (BOOKLET A)

15 questions

20 marks

Total Time for Booklets A and B: 1 hour

NAME :(	<b>(</b> )
CLASS: PRIMARY 5	

### **INSTRUCTIONS TO CANDIDATES**

- 1. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
- 2. FOLLOW ALL 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.

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 70 000 + 9000 + 200 + 5 = \_\_\_\_\_
  - (1) 70 925
  - (2) 79 025
  - (3) 79 205
  - (4) 79 250
- The digit 4 in 458 321 is in the \_\_\_\_\_ place.
  - (1) hundreds
  - (2) thousands
  - (3) ten thousands
  - (4) hundred thousands
- 3 Arrange these fractions from greatest to smallest.

$$\frac{7}{6}$$
,  $\frac{4}{3}$ ,  $1\frac{1}{2}$ 

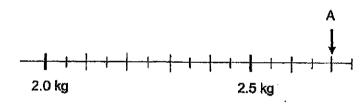
-- Greatest Smallest

- (1)  $\frac{7}{6}$  ,  $\frac{4}{3}$  ,  $1\frac{1}{2}$
- (2)  $\frac{4}{3}$  ,  $\frac{7}{6}$  ,  $1\frac{1}{2}$
- (3)  $1\frac{1}{2}$ ,  $\frac{4}{3}$ ,  $\frac{7}{6}$
- (4)  $1\frac{1}{2}$ ,  $\frac{7}{6}$ ,  $\frac{4}{3}$

- Which of the following is likely to be the mass of a pear? 4
  - 12 g (1)
  - (2) 120 g
  - (3) 1200 g
  - 12 000 g (4)



- Which decimal is greater than 0.08 but smaller than 0.17? 5
  - (1) 0.01
  - (2) 0.10
  - (3) 0.18
  - (4) 0.90
- 6 In the scale below, what is the value of A?

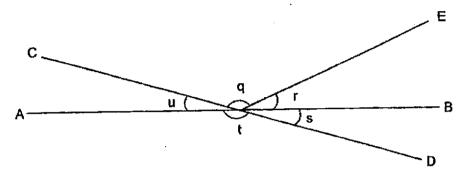


- 2.70 kg (1)
- (2) 2.75 kg
- (3) 2.90 kg
- (4) 3.00 kg
- A solid cuboid has a height of 8 cm and a square base of sides 5 cm. Find its volume. 7
  - 40 cm<sup>3</sup> (1)
  - (2) 200 cm<sup>3</sup>
  - (3) 240 cm<sup>3</sup>
  - (4) 320 cm<sup>3</sup>



8 cm

- A machine takes 2 min to print 6 posters. At the same rate, how long will it take to print 48 posters?
  - (1) 8 min
  - (2) 12 min
  - (3) 16 min
  - (4) 24 min
- 9 In the figure below, AB and CD are straight lines.



Which of the following is true?

- (1) ∠r=∠u
- (2)  $\angle q + \angle r = 180^{\circ}$
- (3)  $\angle q + \angle r + \angle s = 180^{\circ}$
- (4)  $\angle q + \angle r + \angle s + \angle t = 360^{\circ}$
- 10 Round off 87 954 to the nearest thousand.
  - (1) 80 000
  - (2) 87 000
  - (3) 88 000
  - (4) 90 000

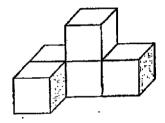
11 The heights of four boys are given in the table below.

Name	Height
Ali	1.6 m
Bala	1 m 32 cm
Chenle	145 cm
Danial	$1\frac{1}{2}$ m

Who is the tallest?

- (1) Ali
- (2) Bala
- (3) Chenle
- (4) Danial
- 12 There are 24 yellow balloons and 56 purple balloons. What is the ratio of the number of purple to yellow balloons?
  - (1) 3:7
  - (2) 7:3
  - (3) 3: 10
  - (4) 7:10
- Which one of the following is the greatest in value?
  - (1) 32 ÷ 100
  - (2)  $32 \div 1000$
  - (3) 320 ÷ 100
  - (4) 320 ÷ 1000

- 14  $\frac{2}{3}$  of a number is 12. What is  $\frac{1}{2}$  of the number?
  - (1). 8
  - (2) 9
  - (3) 18
  - (4) 4
- What is the least number of cubes to be added to the solid figure below to form a cuboid?



- (1) 5
- (2) 7
- (3) 12
- (4) 22

End of Booklet A Go on to Booklet B



# MARIS STELLA HIGH SCHOOL (PRIMARY) END-YEAR EXAMINATION PRIMARY 5 MATHEMATICS 26 OCTOBER 2023 PAPER 1 (BOOKLET-B)...

15 questions

25 marks

Total Time for Booklets A and B: 1 hour

NAME:	
CLASS : PRIMARY 5	)

### **INSTRUCTIONS TO CANDIDATES**

- 1. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
- 2. FOLLOW ALL INSTRUCTIONS CAREFULLY.
- ANSWER ALL QUESTIONS.
- 4. WRITE YOUR ANSWERS IN THIS BOOKLET.
- 5. YOU ARE **NOT** ALLOWED TO USE A CALCULATOR.

MARKS OBTAINED FOR						
PAPER 1 (BOOKLET A)	/ 20	Parent's Signature:				
PAPER 1 (BOOKLET B)	/ 25					
TOTAL	/ 45	Date:				

ues or d	stions 16 to 20 carry 1 mark each. Write your answers in the spaces provided.  [Usestions which require units, give your answers in the units stated. (5 marks)	Do not write in this space.
6	Find the value of $50 - (6 + 6) \div 2 \times 3$ .	-
		-
	•	
	Answer:	-
7	The capacity of a container is 28 t. It takes 7 min to fill up the tank. What is the rate of water flowing into the tank per minute?	
	Answer: ℓ / mir	1
8	Find the largest multiple of 8 that is smaller than 60.	
	8,16,24,32,40,	
	· •	
	Answer:	_

19	Find the value of 45 ÷ 200. Express your answer as a fraction in its simplest form.	Do not write in this space.
	Answer:	
20	Express $4\frac{5}{9}$ as a decimal correct to 2 decimal places.	
	- Answer:	

k	s)	space.
	Eric saved \$20 000 in a bank for one year. The bank paid 2% interest rate at the end of each year. How much did he earn as interest at the end of the year?	
	·	
	Answer: \$	
	Kala had 40 more chocolates than Jackson at first. Jackson gave 10 of his chocolates to Kala. In the end, Kala has five times as many chocolates as Jackson. How many chocolates did Jackson have in the end?	
	chocolates to Kala. In the end, Kala has five times as many chocolates as Jackson.	· · · · · · · · · · · · · · · · · · ·
	chocolates to Kala. In the end, Kala has five times as many chocolates as Jackson.	
	chocolates to Kala. In the end, Kala has five times as many chocolates as Jackson.	
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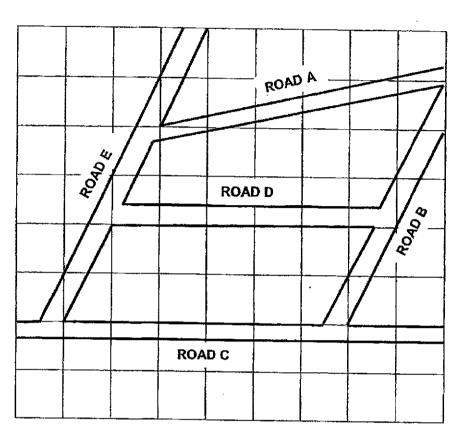
ABC is a right-angle triangle. Find the area of triangle ABC. 23 Do not write in this space. 8 cm 6 cm 10 cm Answer: 2 pencils and 4 notebooks cost \$26. 4 pencils and 2 notebooks cost \$22. Find the 24 cost of 1 notebook.

Answer: \$

5	Jan drew 3 ovals of different sizes to were in the ratio 12: 10: 3. She then What fraction of the figure was unsha	shaded some pa	ow. The areas of the 3 ovals arts of the figure as shown.	Do no write in this space
			nswer:	
6	The table below show the charges for	or renting a bicyc	le at Pasir Ris Park.	1
	Firet hour	1 \$6		
	First hour Every additional 30 min or less	\$6 \$2.50	uch did he pay for the rental?	
		\$2.50	uch did he pay for the rental?	

Do not write in this space.

27	The figure shows	five roads drawn on a	map in a square grid.
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Name the two pairs of roads that are parallel to each other.

Answer: Road \_\_\_\_\_ and Road \_\_\_\_\_ Road \_\_\_\_ and Road \_\_\_\_

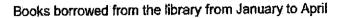
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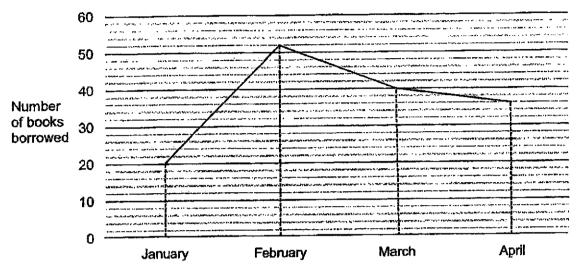
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ORE	

28 The graph below shows the total number of books borrowed from the library from January to April.

Do not write in this space.





- (a) In which 1-month interval was there an increase in the number of books borrowed?
- (b) There were \_\_\_\_\_ more books borrowed in March than April.

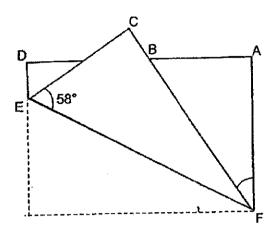
Answer: (a) \_\_\_\_\_\_ and \_\_\_\_\_ [1] (b) \_\_\_\_\_ [1]

SCORE

29	a) U: La	one sid se a pe abel poi easure	ncil to d nts C a	omplet nd D cl	te the d	Irawing	g of rho	ombus .	ABCD.			[1m] [1m]	Do not write in this space.
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30 In the figure below, a rectangular piece of paper is folded along a straight line EF. Find ∠AFB.

Do not write in this space.



Answer:

End of Paper 1

14

SCORE



### MARIS STELLA HIGH SCHOOL (PRIMARY) END-YEAR EXAMINATION PRIMARY 5 MATHEMATICS 26 OCTOBER 2023 PAPER 2

17 questions 55 marks

Time: 1 h 30 min

NAME :	(	)
CLASS: PRIMARY 5		

### **INSTRUCTIONS TO CANDIDATES**

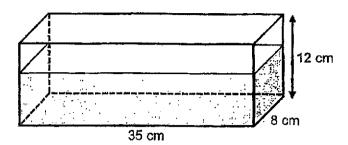
- 1. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
- 2. FOLLOW ALL INSTRUCTIONS CAREFULLY.
- 3. ANSWER ALL QUESTIONS.
- 4. SHOW YOUR WORKINGS CLEARLY AS MARKS ARE AWARDED FOR CORRECT WORKING.
- 5. WRITE YOUR ANSWERS IN THIS BOOKLET.
- 6. YOU ARE ALLOWED TO USE A CALCULATOR.

MARKS OBTAINED FOR		
PAPER 1 (BOOKLET A & B)	/ 45	Parent's Signature:
PAPER 2	/ 55	
TOTAL	/100	Date:

Que eact	stions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for question and write your answers in the spaces provided. (10 marks)	Do not write in this
1	What fraction of the rectangles below are shaded?	space.
	Answer:	
2	In the figure below, VZY is a straight line. Find the value of $\angle$ a.	
	w /	
	x 32° x	
	<b>Y</b>	
	Answer:	
	1 SCORE (Go on to the next page	E )

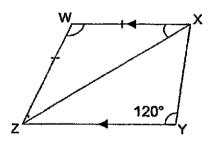
The rectangular tank below is  $\frac{3}{5}$  filled with water. How much more water is needed to fill the rectangular tank to the brim?

Do not write in this space.



Answer:	ml

4 WXYZ is a trapezium and WZ = WX.



Each statement below is either *true*, *false* or *not* possible to tell from the information given. For each statement, put a tick  $(\sqrt{})$  in the correct column.

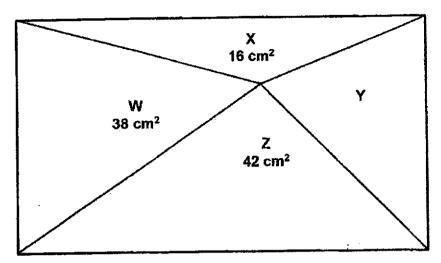
. Statement	True	False	Not possible to tell
a) ∠XWZ + ∠WZY = 180°			
b) ∠WXZ = 30°			

2

SCORE (Go on to the next page)

The figure below shows a rectangle that has been cut into 4 triangles, W, X, Y and Z. Find the area of triangle Y.

Do not write in this space.



Answer: \_\_\_\_\_ cm<sup>2</sup>

3

SCORE (Go on to the next page)

prov	for questions 6 to 17, show your workings clearly and write your answer 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)		
6	A baker had some flour. After he used $4\frac{3}{5}$ kg of flour to bake a cake, he bought	space.	
	another $2\frac{1}{2}$ kg of flour. He had 9 kg of flour now. How much flour did he have at first?		
	Answer:[3]		
7	In a carpark, there are cars and bicycles. There are 24 more cars than bicycles. There are 276 wheels altogether in that carpark. How many bicycles are there altogether?		
	Answer:[3]		
	4 SCORE (Go on to the next page)		

8	Container A contained 1.05 kg of rice. Container B contained 3.09 kg of rice. After an equal amount of rice was removed from each container, Container B now has 4 times as much rice as Container A. How much rice was removed from each container? Give your answer in kilograms.		
	Answer:[3]		
9	The average mass of 6 boys in a room was 52 kg. When 2 boys left the room, the average mass of the boys left was 48 kg. What was the average mass of the 2 boys who left the room?		
	Answer:[3]		
	5 SCORE (Go on to the next page)		

10	Sheena was given \$8 as pocket money each day. On Mondays to Fridays, she spent \$5.60 every day and saved the rest. She did not spend any money on the weekends and saved her pocket money. Sheena started saving on Monday. How many days would it take for Sheena to save \$35.20?	Do not write in this space.
	Answer:[3]	
٠	6 SCORE (Go on to the next page)	

The	students were ask graph below sho tudents is not sho	ed to choose one we the number of win on the scale.	sport – basketb students who c	oall, badminton or t hose each sport. <sup>-</sup>	able tennis. The number	Do not write in this space.
Number of students	Baskett	all Bad	minton	Table Tennis		
		students ch			s.	
			Answer: (a)	)	[2]	
			(b)		[1]	

7

SCORE

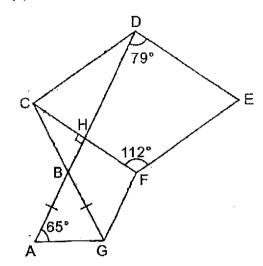
(Go on to the next page)

12	The ratio of the number of apples to mangoes sold by Shop A is 4:3. The ratio of the number of apples to mangoes sold by Shop B is 3:2. Shop A and B sold an equal number of mangoes. 70 more apples were sold in Shop B than in Shop A. How many apples and mangoes were sold in total in Shop B?	
	Answer:[4]	
	[4]	
	8 SCORE (Go on to the next page)	

The figure below is not drawn to scale. It is made up of rhombus CDEF and triangles CGF and ABG. AB = BG. Find 13

Do not write in this space.

(a) ∠ABG (b) ∠BCH

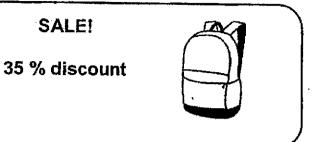


Answer: (a) \_\_

[3]

9

**SCORE** (Go on to the next page) 14 The brochure below shows the details on a sale in Shop A.



Do not write in this space.

- (a) Anita bought 2 of the same leather bags during a sale in Shop A. The usual price of the leather bag was \$450. Find the amount of discount she received for both bags.
- (b) Meili bought a backpack at the sale. The usual price of the backpack was 40% of the usual price of the leather bag. What was the discounted price of the backpack?

Answer:	(a)	[2]
r same	(b)	[2]

10

SCORE (Go on to the next page)

15	Siti's mother gave her some mone the usual price. During a sale, Siti result, she was able to buy 19 mo	was given a discount	t of \$3.40 for each file. As a	Do not write in this space.
	<ul><li>(a) What was the price of one</li><li>(b) How much did Siti's mother</li></ul>	file during the sale? er give her?		
-		Answer:	(a)	3]
			(b)	[2]
		11	SCOF	E I
			(Go on to the next page	*)

16	All and Betty had a total of \$5700. After All spent $\frac{1}{3}$ of his money and Betty spent $\frac{2}{5}$ of her money, they had an equal amount left. Betty then used $\frac{3}{4}$ of the amount	Do not write in this space.
	she had left to buy a laptop and gave the remaining amount to her sister and brother. Betty's brother received 3 times the amount that Betty's sister received.	
	a) How much did Betty have at first?	
	b) How much did Betty's sister receive?	
	·	
		1
	Answer: (a) [2]	
	(b)[3]	
	12 SCORE	
	12 SCORE (Go on to the next page)	

- 17 The area of triangle PRQ is 16 cm<sup>2</sup>. QRST is a square. WQUV is a rectangle and ZRS and ZTU are right-angle triangles. WQ = QR, ZS = 5 cm and WV = 17 cm.
  - a) What is the length of RQ?
  - b) Find the total area of the figure below.

Do not write in this space.

÷		R P	cm Z
w		Ţ	S
	17 cm		
			·

Answer: (a) [1] (b) [4]

End of Paper 2

13

SCORE

SCHOOL :

MARIS STELLA HIGH SCHOOL

LEVEL :

**PRIMARY 5** 

SUBJECT:

**MATHEMATICS** 

TERM :

2023 SA2

#### PAPER 1 (BOOKLET A)

Q1	3	- <b>G</b> 2 1	4	<b>©</b> 8	3	Φ <b>Z</b> t	2	0.5	2
0.6	1	- Q7A	2	Q <b>E</b>	3	(99)	3	910	3
(Grights	1	@42#	2	Q13;	, <b>3</b>	Q14	2	(0)5	2

### PAPER 1 (BOOKLET B)

Q16	29
Q17	4 ℓ / min
Q18	56
Q19	9 40
Q20	4.56
Q21	$\frac{2}{100}$ x \$20000 = <b>\$400</b>
Q22	4u = 60 1u = <b>15</b>
Q23	24 cm <sup>2</sup>
Q24	2P + 4N = \$26 4P +2N = \$22 Make P the same by multiplying 2 to the first statement: 4P + 8N = \$52 Difference: 8N - 2N = 6N 6N = \$52 - \$22 = \$30 1N = \$5
Q25	Total area = $12u$ Unshaded area = $10u - 3u = 7u$ Fraction unshaded = $\frac{7}{12}$
Q26	\$16
Q27	Road C and Road D; Road B and Road E
Q28a	January and February

Q28b	4	
Q29a		
Q29b	70°	
Q30	∠CFE = 180° - 58° - 90° = 32° ∠AFB = 90° - 32° - 32° = <b>26</b> °	

### PAPER 2

Q1	<u>5</u> 12	 
Q2	58°	 
Q3	$\frac{2}{5}$ x 12 x 8 x 35 = <b>1344 ml</b>	 
Q4a	True	 
Q4b	False	 
Q5	42 ÷ 3 = 12 cm <sup>2</sup> 16 ÷ 2 = 8 cm <sup>2</sup> Area of Y = 12 + 8 = <b>20</b> cm <sup>2</sup>	
Q6	$9 - 2\frac{1}{3} = 6\frac{1}{2} \text{ kg}$ $6\frac{1}{2} + 4\frac{3}{5} = 11\frac{1}{10} \text{ kg}$	 
Q7	24 x 4 = 96 276 - 96 = 180 Group 1 car and 1 bicycle as a set: total 6 wheels 180 ÷ 6 = <b>30</b>	
Q8	3u = 3.09 - 1.05 = 2.04 kg 1u = 0.68kg Removed = 1.05 - 0.68 = <b>0.37 kg</b>	 
Q9	Average mass of 6 boys = $6 \times 52 = 312 \text{ kg}$ Average mass of 4 boys = $4 \times 48 = 192 \text{ kg}$ Average mass of the 2 boys = $(312 - 192) \div 2 = 60 \text{ kg}$	
Q10	Total pocket money for the week = \$8 x 7 = \$56 Total saved in a week = \$56 - \$(5.60 x 5) = \$28 \$35.20 - \$28 = \$7.20 Amount saved on a weekday = \$8 - \$5.60 = \$2.40 \$7.20 ÷ \$2.40 = 3 3 + 7 = <b>10 days</b>	

Q11a	Total units = 16u 16u = 80 1u = 5 10u = <b>50</b>
Q11b	$\frac{30}{80}$ x 100% = 37.50%
Q12	Shop A Shop B A: M A: M 4: 3 $\times$ 2 3: 2 $\times$ 8: 6 $\times$ 9: 6 $\times$ 1 1u = 70 15u = 70 x 15 = <b>1050</b>
Q13a	∠ABG = 180° - 65° - 65° = <b>50</b> °
Q13b	∠DCF = 180° - 112° = 68° ∠BCH = 180° - 33° - 68° - 50° = <b>29</b> °
Q14a	$\frac{35}{100}$ × \$(450 + 450) = <b>\$315</b>
Q14b	Usual price of backpack = $\frac{40}{100}$ x \$450 = \$180 Discounted price = $\frac{65}{100}$ x \$180 = \$117
Q15a	Total discount = 68 x \$3.40 = \$231.20 19F = \$231.20 - \$3.20 = \$228 1F = \$228 ÷ 19 = <b>\$12</b>
Q15b	Total files bought = 68 + 19 = 87 Amount given = 87 x \$12 + \$3.20 = <b>\$1047.20</b>
Q16a	19u = \$5700 1u = \$300 10u = <b>\$3000</b>
Q16b	Amount Betty had left = $\frac{3}{5}$ x \$3000 = \$1800 Amount given to siblings = \$1800 ÷ 4 = \$450 Amount sister received = \$450 ÷ 4 = \$112.50
Q17a	Area of QRST = 16 x 4 = 64cm <sup>2</sup> Length of RQ = 8cm
Q17b	Area of $\triangle$ SRZ = 20 cm <sup>2</sup> Area of $\triangle$ ZTU = 58.5 cm <sup>2</sup> Area of QUVW = 17 x 8 = 136 cm <sup>2</sup> Total area = 64 + 20 + 58.5 + 136 = <b>278.5cm</b> <sup>2</sup>