Maha Bodhi School
2023 End-of-Year Examination
Primary 5
Mathematics
Paper 1
(Booklet A)

Name : _____ ( )

Class : Primary 5 _____

Date : 24 October 2023

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Use a 2B pencil to shade your answers in the Optical Answer Sheet (OAS).
5. The use of calculators is **NOT** allowed.

This booklet consists of 7 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) and shade your answer on the Optical Answer Sheet.
(20 marks)

---

1. Which of the following is eight hundred and five thousand and thirteen in numerals?

   (1) 800 513
   (2) 805 013
   (3) 805 130
   (4) 850 013

2. What is the value of 36 000 ÷ 40?

   (1) 9
   (2) 90
   (3) 900
   (4) 9 000

3. Find the value of $102 - 24 \div (3 + 1) \times 2$

   (1) 39
   (2) 84
   (3) 90
   (4) 96

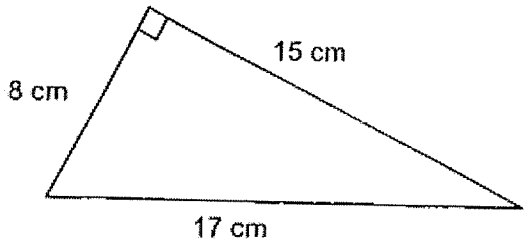
4. Which of the following is equal to $5\frac{2}{5}$?

(1) 5.52
(2) 5.40
(3) 5.25
(4) 5.20

5. What does the digit 6 in 4.567 stand for?

(1) 6 ones
(2) 6 tenths
(3) 6 hundredths
(4) 6 thousandths

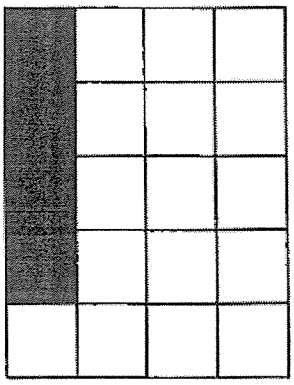
6. The figure shows a right-angled triangle.



Find the area of the triangle.

(1) 136 cm^2
(2) 120 cm^2
(3) 68 cm^2
(4) 60 cm^2

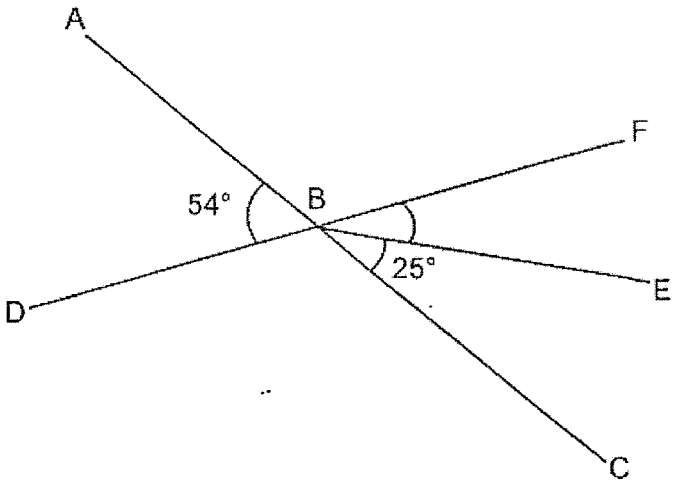
7. The figure is divided into 20 equal parts.



What percentage of the figure is shaded?

(1) 25%
(2) 20%
(3) 5%
(4) 4%

8. In the figure, ABC and DBF are straight lines.



Find ∠FBE.

(1) 31°
(2) 29°
(3) 27°
(4) 25°

9. At a birthday party, each child got to choose one ice-cream flavour.
The table below shows their choices.

Flavour	Number of girls	Number of boys	Total number of children
Mango	22	18	40
Vanilla	34	20	54
Chocolate	17	35	52
Strawberry	36	24	60

Which flavour was the most popular among the children?

(1) Mango
(2) Vanilla
(3) Chocolate
(4) Strawberry

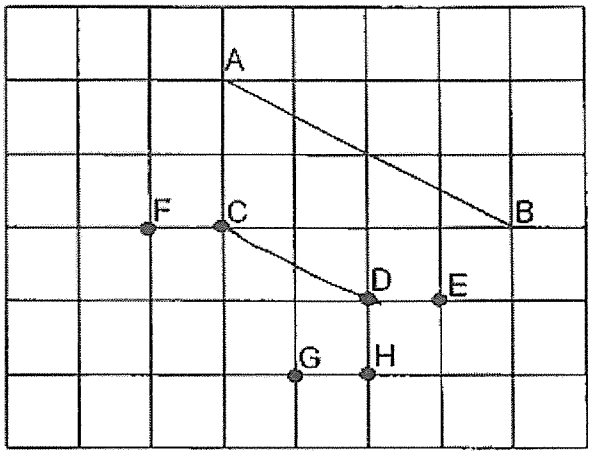
10. In a movie marathon guide shown below, movies are screened one after another without any break in between.

Start Time	Movie
9.00 a.m	My Home
10.15 a.m	You Got It!
11.35 a.m	Time of My Life
12.20 p.m	The Great Save
1.20 p.m	-

Which movie has the longest duration?

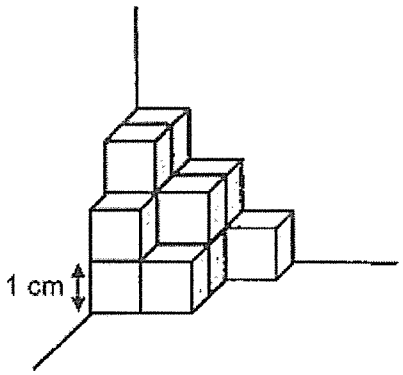
(1) My Home
(2) You Got It!
(3) Time of My Life
(4) The Great Save

11. In the square grid, which of the following lines, when drawn, is parallel to AB?



(1) CD
(2) CE
(3) FG
(4) FH

12. The solid figure shown below is made up of 14 identical 1-cm cubes glued together. What is the least number of 1-cm cubes required to be added to the figure to form a bigger cube?



(1) 13
(2) 19
(3) 27
(4) 48

13. The ratio of the number of girls to the number of boys in the library is 6 : 5. Which of the following statements is **not possible**?

(1) There are a total of 40 girls in the library.
(2) There are a total of 88 children in the library.
(3) There are fewer boys than girls in the library.
(4) The number of boys in the library is a multiple of 5.

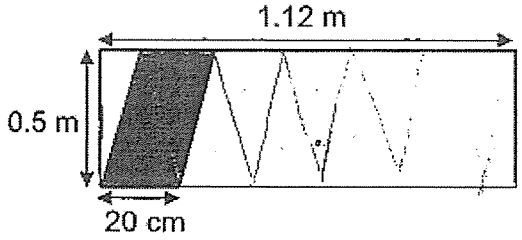
14. The table below shows the timings recorded by Perry during his practice sessions for a race.

1st Practice	2nd Practice	3rd Practice	4th Practice	5th Practice
11.4 s	12.7 s	10.6 s	11.3 s	?

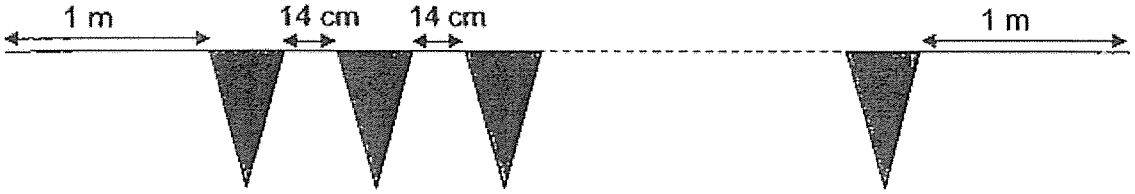
After the 4th practice, Perry wishes to improve his overall average by 0.3 seconds. What timing must he clock for the 5th practice?

(1) 10.0 s
(2) 11.2 s
(3) 11.8 s
(4) 13.0 s

15. Jonathon cut identical isosceles triangles with a base of 20 cm from a big piece of paper which measures 0.5 m by 1.12 m as shown in the figure.



Jonathon then glued all the triangles together on a string to form a party banner as shown in the diagram below. Each triangle is placed 14 cm apart. 1 m of string was left at each end of the banner.



How long was the string used for the party banner?

(1) 4.92 m
(2) 5.26 m
(3) 5.40 m
(4) 5.60 m

Remember to check your work!
~ End of Booklet A ~

Maha Bodhi School
2023 End-of-Year Examination
Primary 5
Mathematics
Paper 1
(Booklet B)

Name : _____ ( ) Marks: ⁄ 25

Class : Primary 5_____

Date : 24 October 2023

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES:

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

This booklet consists of 8 printed pages.

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)

16. Find the value of $\frac{2}{5} \times \frac{3}{4}$

Ans: _____

17. Find the value of $\frac{9}{8} \times 32$

Ans: _____

18. Find the value of $16 \div 64$.
Give your answer as a fraction in its simplest form.

Ans: _____

/ 3

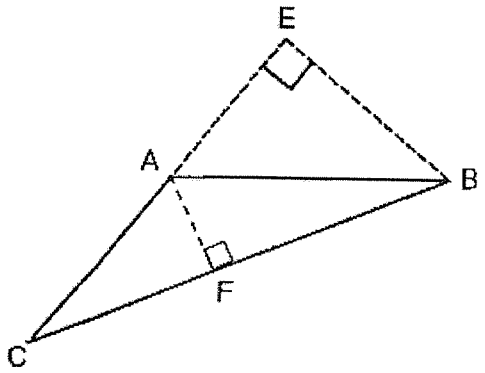
19. Find the value of $4.1 \div 50$

Express your answer as a decimal.

Ans: _____

20. AC is the base of triangle ABC.

Name the height that is related to the given base of triangle ABC.



Ans: _____

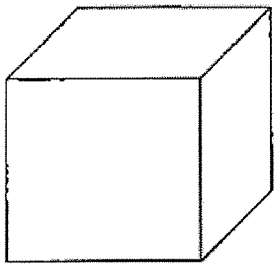
/ 2

Questions 21 to 30 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided.

For questions which require units, give your answers in the units stated. (20 marks)

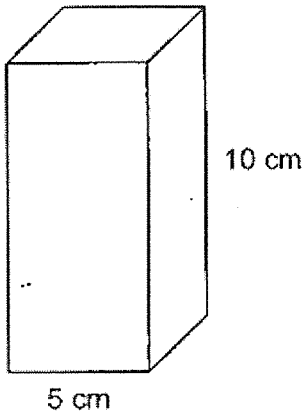
---

21. (a) What is the volume of the cube shown below?



Ans: (a) _____ cm^3

(b) A cuboid of height 10 cm has a square base of side 5 cm.
What is its volume?



Ans: (b) _____ cm^3

/ 2

22. Mrs Tan had 260 toys for sale.

She sold 10% of them in September and 143 of them in October.

(a) How many toys did she sell in September?

Ans: (a) _____

(b) What percentage of the toys did she sell in October?

Ans: (b) _____

23. Gear A makes 72 rotations in 6 minutes.

Gear B makes 81 rotations in 9 minutes.

(a) How many rotations will Gear A make in 1 minute?

Ans: (a) _____

(b) Which gear rotates at a slower rate?

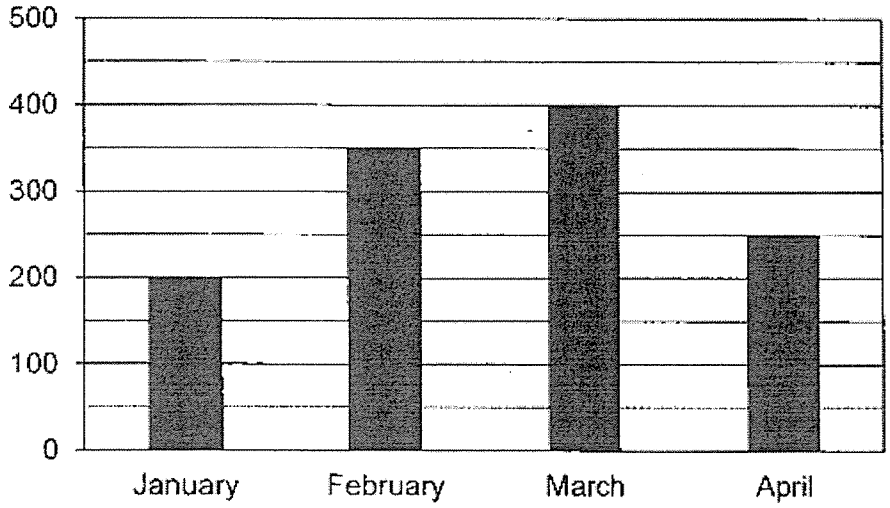
Ans: (b) Gear _____

/ 4

24. List all the common factors of 16 and 36.

Ans: _____

25. The bar graph below shows the number of cars sold from January to April.



Find the average number of cars sold from January to April.

Ans: _____

/ 4

26. When a number is multiplied by 5, the product is twice the sum of 11.07 and the number itself. What is the number?

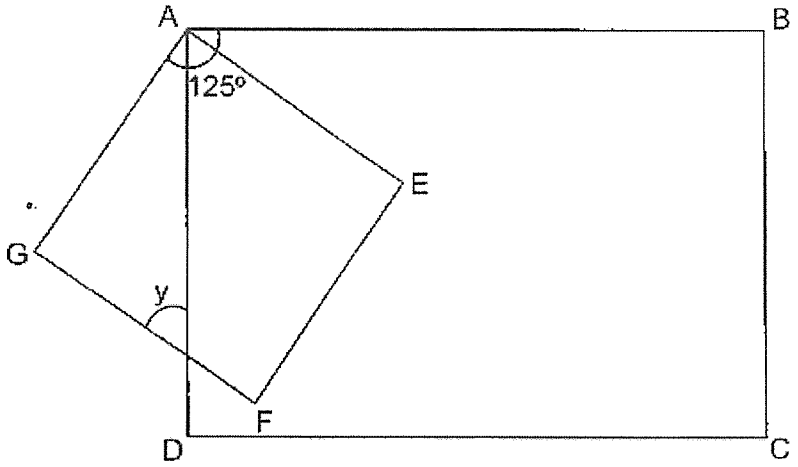
Ans: _____

27. Gabriel drove from Singapore to Kuala Lumpur.
He left Singapore at 8.10 a.m. and thought that he would take 5 h 15 min to reach Kuala Lumpur. He arrived 35 min earlier in the end.
What time did he reach Kuala Lumpur?

Ans: _____

/ 4

28. ABCD is a rectangle and AEFG is a square. ∠GAB is 125°.



Find ∠y.

Ans: _____ °

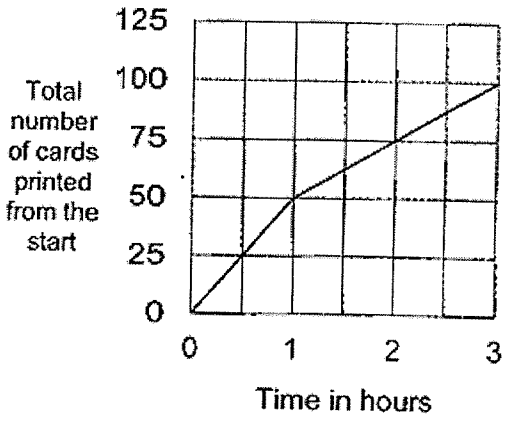
29. A bookshelf can hold a maximum of either 36 small books or 24 big books.
There are already 12 small books on the bookshelf.
At most, how many more big books can the bookshelf hold?

Ans: _____

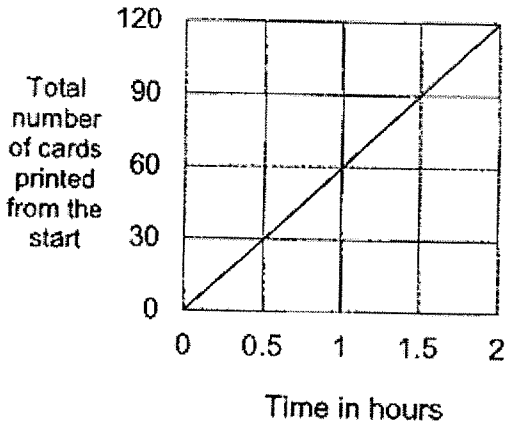
/ 4

30. The graphs below show the total number of cards printed by machines Y and Z from the start. Both machines started printing at the same time.
From the second hour onwards, both machines did not change their rates of printing throughout.

Machine Y



Machine Z



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
In the first hour, Machine Z took 10 minutes longer to print the same number of cards as Machine Y.			
It will take 5 hours for Machine Z to print twice as many cards as Machine Y.			

Remember to check your work!
~ End of Booklet B –

/ 2

Maha Bodhi School
2023 End-of-Year Examination
Primary 5
Mathematics
Paper 2

Name : _____ ( )

Class : Primary 5 _____

Date : 24 October 2023

Time: 1 h 30 min

INSTRUCTIONS TO CANDIDATES:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of an approved calculator is allowed.

Paper	Booklet	Marks Obtained	Max Marks
1	A		20
	B		25
2	-		55
Total			**100**

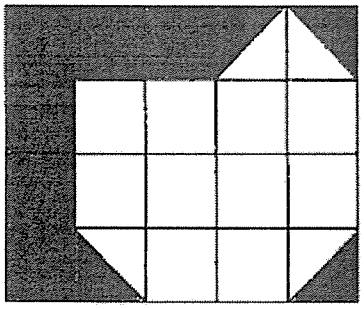
Parent's signature: _____

This booklet consists of 17 printed pages.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

---

1. The figure below is divided into 20 equal squares.



How many **more** such squares should be shaded so that 70% of the figure is shaded?

Ans: _____

2. When a number is divided by 9, it gives a quotient of 286 and a remainder that is a one-digit odd number. If 4 is added to the number, there will not be any remainder. What is the number?

Ans: _____

/ 4

3. One packet of 4 pens was sold at $7.95.
A stationery shop was having a promotion.
For every 2 packets of pens bought, Simon received a discount of $1.50.
He bought 28 pens in total. How much did he spend?

Ans: $ _____

4. Mrs Kim prepared 3.05 ℓ of lemonade to serve her guests.
She poured exactly 400 ml of lemonade into each glass.
What is the most number of glasses of lemonade she could get?

Ans: _____ ℓ

/ 4

5. The table shows the charges for water usage in Singapore.

Water usage	Rate
First 40 m^3	\$1.21 per m^3
Above 40 m^3	\$1.52 per m^3

Mrs Tan's family used 43 m^3 of water in October.

How much did Mrs Tan have to pay?

Ans: \$_____

/ 2

For questions **6** to **17**, show your working clearly in the space provided for each question 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)

6. Marcus bought a total of 56 apples, pears and oranges.

The ratio of the number of apples to the number of oranges is 2 : 1.

The ratio of the number of pears to the number of oranges is 4 : 1.

(a) Find the ratio of the number of apples to the number of pears to the number of oranges Marcus bought.

Ans: (a) _____ [1]

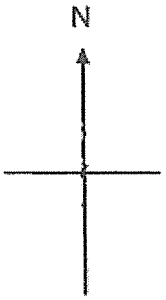
(b) How many pears did Marcus buy?

Ans: (b) _____ [2]

/ 3

7.

Hawker Centre		Sports Hall		
			Home	
		Carpark		School
			Library	
Market		Field		



(a) Jim was standing at the carpark facing southwest. He wants to face the library.

How many $\frac{1}{4}$-turns would he need to make in the clockwise direction?

Ans: (a) _____ [1]

(b) Jim was standing at the carpark again.

He turned 225° clockwise to face the market in the end.

Where was he facing before he turned?

Ans: (b) _____ [2]

/ 3

8. Mr Chan had a sum of money at first. He gave $\frac{2}{5}$ of it to his wife.

He gave $\frac{3}{4}$ of the remainder to his two children.

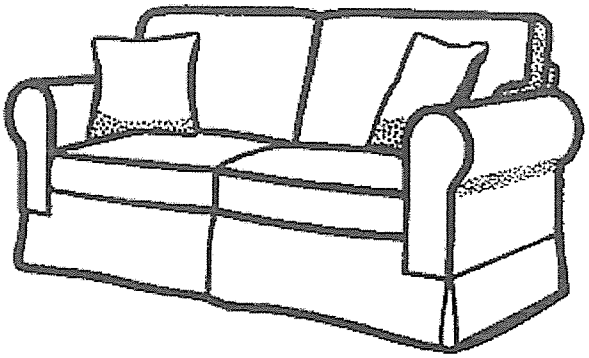
Each child received the same amount of money. Mr Chan saved the rest of his money. He saved $378. How much did Mr Chan give to each of his children?

Ans: _____ [3]

/ 3

9. A sofa cost $1850.

Bala bought the sofa during a sale and a discount of 25% was given.



(a) What was the discounted price?

Ans: (a) _____ [1]

(b) Bala was charged 8% GST on the discounted price.

How much did he pay for the sofa including GST?

Ans: (b) _____ [2]

/ 3

10. At a carnival, the admission ticket prices for a child and an adult are shown in the table below.

Type	Price per ticket
Child	$10
Adult	$25

The number of children was thrice the number of women at a carnival. The number of women was twice the number of men. There were 210 children at the carnival.
How much more was collected from the sale of adult tickets compared to child tickets?

Ans: _____ [4]

/4

11. A container, when completely packed, can hold 20 identical bags.
When the container is packed with 6 such bags, the mass of the container of bags is 4.71 kg.
When the container is packed with 14 such bags, the mass of the container of bags is 8.31 kg.

(a) Find the mass of the empty container.

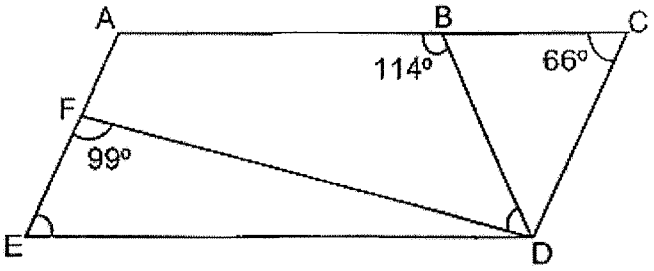
Ans: (a) _____ [3]

(b) Find the mass of the container when it is completely packed.

Ans: (b) _____ [1]

/ 4

12. In the figure below, ACDE is a parallelogram and ABDE is a trapezium.



(a) Find ∠AED.

Ans: (a)_____ [1]

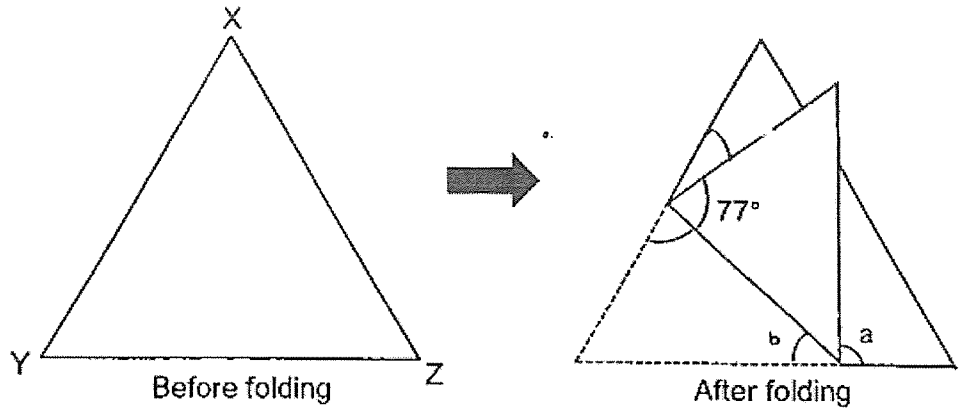
(b) Find ∠FDB.

Ans: (b) _____ [3]

/ 4

13. XYZ is a piece of triangular paper. XY = YZ = XZ.

The triangular piece of paper is folded as shown below.

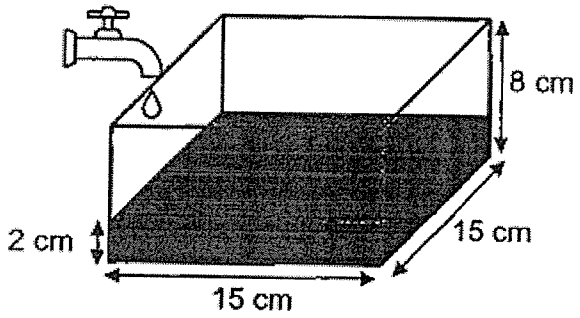


Find ∠a.

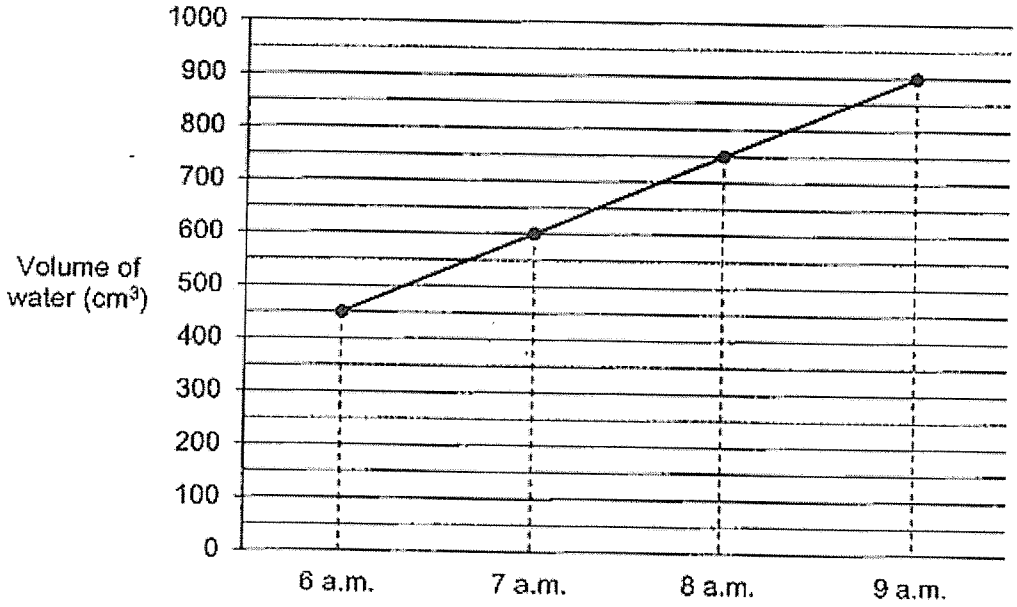
Ans: _____ [3]

/ 3

14. A container measures 15 cm by 15 cm by 8 cm. It contains some water to a depth of 2 cm at first.



The container was then placed below a leaking tap. The graph below shows the volume of water that leaked into the container over 3 hours.



(a) What was the volume of water in the water tank at first?

Ans: (a) _____ [1]

/ 4

(b) Water continued to leak into the container at the same rate.
The container was removed from the tap when it was completely filled.
At what time will the container be completely filled?

Ans: (b) _____ [3]

/ 4

15. The pattern shown below is made up of squares and circles. Figure 1 is made up of a square and 8 circles. Figure 2 is made up of 4 identical squares and 16 circles, and so on. Each figure has the same number of circles on one side.

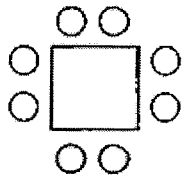


Figure 1

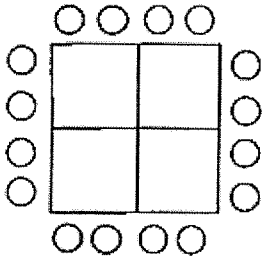


Figure 2

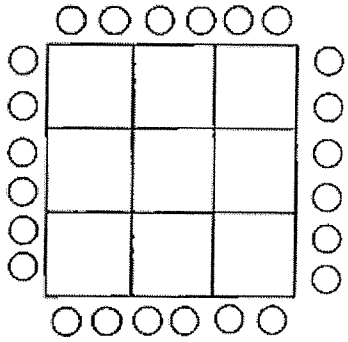


Figure 3

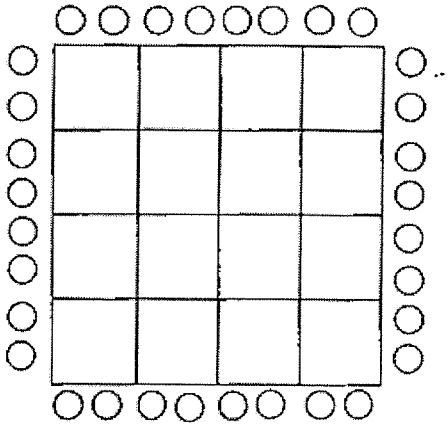


Figure 4

(a) In which figure will there be 12 circles on each side of the figure?

Ans: (a) _____ [1]

(b) How many squares will there be in Figure 15?

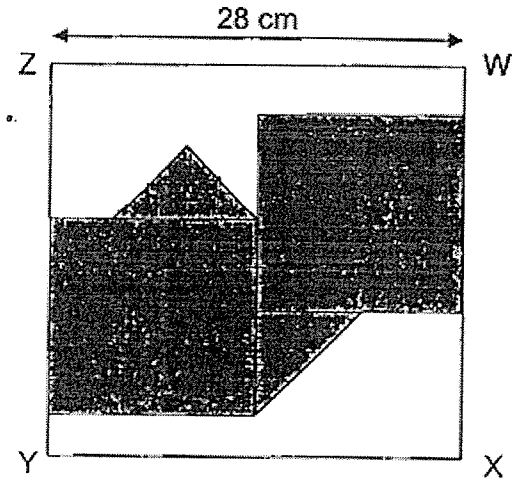
Ans: (b) _____ [2]

(c) Which figure contains 712 circles?

Ans: (c) _____ [2]

/ 5

16. WXYZ is a square piece of paper of side 28 cm. Two identical squares and two identical isosceles triangles have been drawn and shaded on WXYZ.



Find the unshaded area.

Ans: _____ [4]

/ 4

17. Anna, Brenda and Christine had some beads.

Brenda had 176 more beads than Anna at first. Anna gave away $\frac{2}{9}$ of her beads,

Brenda gave away $\frac{4}{7}$ of her beads and Christine received 29 more beads.

In the end, all three girls had the same number of beads.

Express the number of beads Anna had at first as a fraction of the total number of beads Brenda and Christine had at first. Leave your answer in the simplest form.

Ans: _____ [5]

Remember to check your work!

~ End of Paper ~

/ 5

SCHOOL : MAHA BODHI PRIMARY SCHOOL

LEVEL : PRIMARY 5
SUBJECT : MATH
TERM : SA2 (2023)

Q 1	Q2	Q3	Q4	Q5	Q 6	Q7	Q8	Q9	Q10
2	3	3	2	3	4	2	2	4	2
Q11	Q12	Q13	Q14	Q15					
1	1	1	1	2					

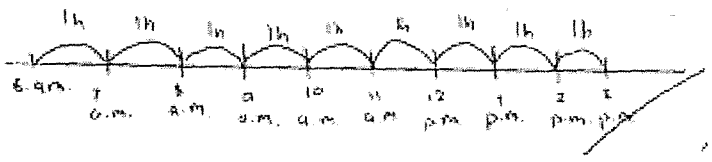
16)	$\frac{3}{10}$
17)	36
18)	¼
19)	$4.1 \div 50 = 4.1 \div 10 \div 5$ $= 0.41 \div 5 = 0.082$
20)	EB
21)	a) 8 x 8x 8 = 512 cm3 b) 5 x 5 x 10 = 250 cm3
22)	a)100% → 260 10% →260 ÷ 10 = 26 b) $\frac{143}{260} x\ 100\% = 55\%$
23)	a)72 ÷ 6 = 12 b)81 ÷ 9 = 9 ANS: Gear B

24)	1, 2, 4
25)	$200 + 350 + 400 + 250 = 1200$ $1200 \div 4 = 300$
26)	7.38
27)	12.50 p.m.
28)	55°
29)	16
30)	False True

PAPER 2

1)	$8 \text{ X } 5 = 40$ $70 - 40 = 30$ $30 \div 5 = 6$
2)	$9 - 4 = 5$ 5 →remainder $9 \text{ x } 286 = 2574$ $2574 + 5 = 2579$
3)	$28 \div 4 = 7$ $7 \div 2 = 3.5$ $1.50 \text{ x } 3 = 4.5$ $7.95 \text{ x } 7 = 55.65$ $55.65 - 4.5 = \$51.15$

4)	3.05L = 3050ml 3050 ÷ 400 = 7.625 ANS: 7
5)	43 = 40 + 3 1.21 x 40 = 48.4 1.52 x 3 = 4.56 48.4 + 4.56 = $52.96
6)	a)2 : 4 : 1 b)2 + 4 + 1 = 7 56 ÷ 7 = 8 8 x 4 = 32
7)	a)3 b)sports Hall
8)	387 x 3 = 1134 1134 ÷ 2 = $567
9)	a)100% →1850 25% →1850 ÷ 4 = 462.5 75% →462.5 x 3 = $1387.5 b)100% →1387.5 1% →1387.5 ÷ 100 = 13.875 8% →13.875 x 8 = 111 1387.5 + 111 = $1498.50

10)	6u = 210 1u = 210 ÷ 6 = 35 2 + 1 = 3 3u = 35 x 3 = 105 105 x 25 = 2625 210 x 10 = 2100 2625 – 2100 = $525
11)	a)2.01kg b)11.01kg
12)	a)< ACD = <AED = 66° b) $<FDE = 180 - 66 - 99 = 15°$ <FDB = 180 – 114 – 15 = 51°
13)	<b =180 – 77 – 60 = 43° <a = 180 – 43 – 43 = 94°
14)	a)2 x 15 x 15= 450ml b)600 – 450 = 150 1 hour →150cm3 8 x 15 x 15 = 1800 1800 – 450 = 1350 1350 ÷ 150 = 9  ANS: 3p.m.

15)	a) $12 \div 2 = 6$ b) $15 \times 15 = 225$ c) $712 \div 4 = 178$ $178 \div 2 = 89$
16)	$28 \div 4 = 7$ $7 \times 2 = 14$ $\frac{1}{2} \times 7 \times 7 = 24.5$ $24.5 \times 2 = 49$ $14 \times 14 = 196$ $196 \times 2 = 392$ $49 + 392 = 441$ $28 \times 28 = 784$ $784 - 491 = 343cm2$
17)