

SA1



**RAFFLES GIRLS' PRIMARY SCHOOL
MID-YEAR EXAMINATION
MATHEMATICS (PAPER 1)
PRIMARY 6**

Name: _____ ()

Form Class: P6 _____

Math Teacher : _____

Date: 10 May 2021

Duration : 1 hour

Your Paper 1 Score (Out of 45 marks)		
Your Paper 2 Score (Out of 55 marks)		
Your Total Score (Out of 100 marks)		
Parent's Signature		

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 and show all working clearly.
4. **NO** calculator is allowed for this paper.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade your answer (1, 2, 3 or 4) on the OAS provided.
All diagrams are not drawn to scale. [20 marks]

1. $1\ 703\ 925 = 1\ 000\ 000 + \underline{\hspace{2cm}} + 920 + 5$

- (1) 703
- (2) 3000
- (3) 700 000
- (4) 703 000

2. How many sixths are there in $5\frac{2}{3}$?

- (1) 34
- (2) 32
- (3) 26
- (4) 17

3. Express $\frac{9}{20}$ as a decimal.

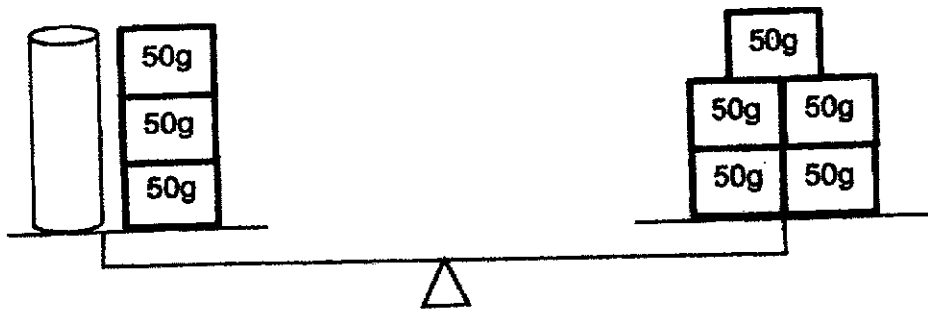
- (1) 0.92
- (2) 0.45
- (3) 0.29
- (4) 0.18

4. Arrange the following numbers from the largest to the smallest.

$2\frac{3}{8}$,	$\frac{15}{7}$,	$\frac{13}{6}$
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- | | <u>Largest</u> | , | <u>Smallest</u> |
|-----|----------------|---|-----------------|
| (1) | $2\frac{3}{8}$ | , | $\frac{15}{7}$ |
| (2) | $2\frac{3}{8}$ | , | $\frac{13}{6}$ |
| (3) | $\frac{13}{6}$ | , | $2\frac{3}{8}$ |
| (4) | $\frac{15}{7}$ | , | $\frac{13}{6}$ |

- 5.

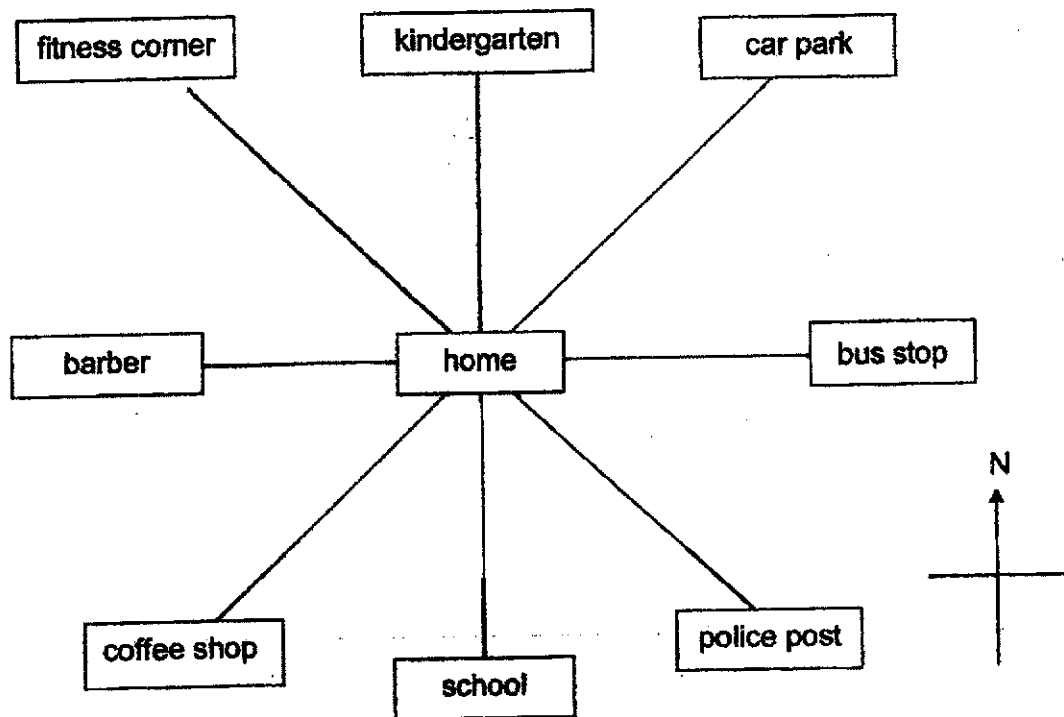


What is the mass of the container?

- (1) 100 g
 (2) 150 g
 (3) 250 g
 (4) 400 g

6. A bookshop has 810 pencils. There are 30 pencils in a box. How many boxes are there?
- (1) 27
 - (2) 270
 - (3) 2430
 - (4) 24 300
7. The number of boys is $\frac{2}{3}$ of the number of pupils. Find the ratio of the number of boys to the number of girls.
- (1) 2 : 3
 - (2) 2 : 1
 - (3) 1 : 2
 - (4) 1 : 3

8. Jamie was at home, facing the car park. She turned an angle of 225° clockwise. Where was she facing after the turn?



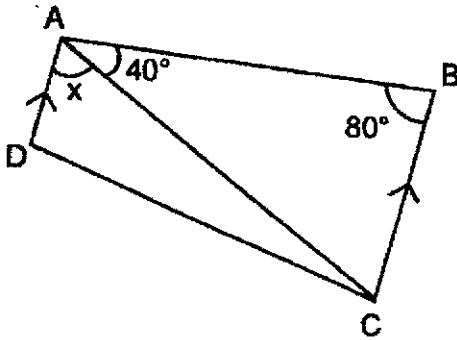
- (1) police post
 (2) school
 (3) fitness corner
 (4) barber
9. Find the value of x given that $2x + 10 = 12$.

- (1) 1
 (2) 2
 (3) 11
 (4) 12

10. Express 10 ml as a percentage of 2 l.

- (1) 0.5%
- (2) 0.05%
- (3) 5%
- (4) 50%

11. Figure ABCD is a trapezium. Find $\angle x$.

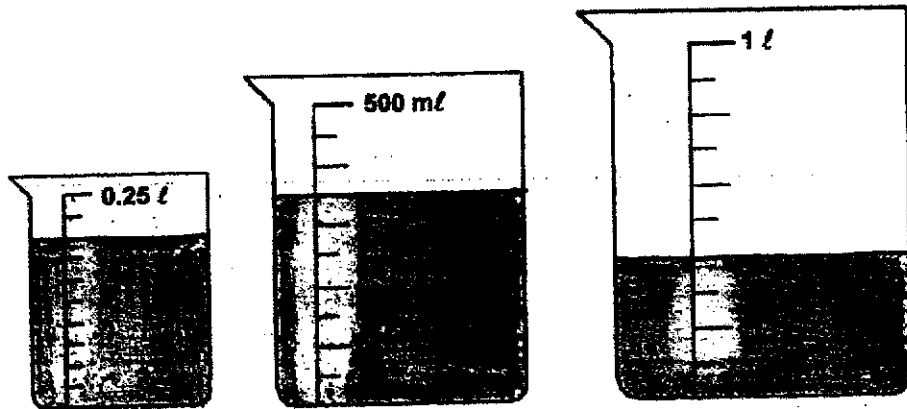


- (1) 40°
 - (2) 60°
 - (3) 80°
 - (4) 120°
12. Jane wanted to buy a dress that cost \$150 at Sunny Store. There was a 20% discount during the Black Friday Sales. As a member, Jane got an additional 10% discount off the discounted price. How much did Jane pay for the dress in the end?
- (1) \$30
 - (2) \$105
 - (3) \$108
 - (4) \$120

13. Jason has 12 kg of salt. He packs them equally into 6000 packets. What is the mass of 1 packet of salt?

- (1) 500 kg
- (2) 50 kg
- (3) 0.002 kg
- (4) 0.02 kg

14. The diagram shows 3 containers with water. What is the total amount of water in all the 3 containers?



- (1) 700 ml
- (2) 750.2 ml
- (3) 950 ml
- (4) 1500.25 ml

15. Candle A and Candle B were lit at the same time. Candle A could last 3 hours and Candle B could last 5 hours. After 1 hour, both candles were equal in length. What was the ratio of the length of Candle A to the length of Candle B at first?

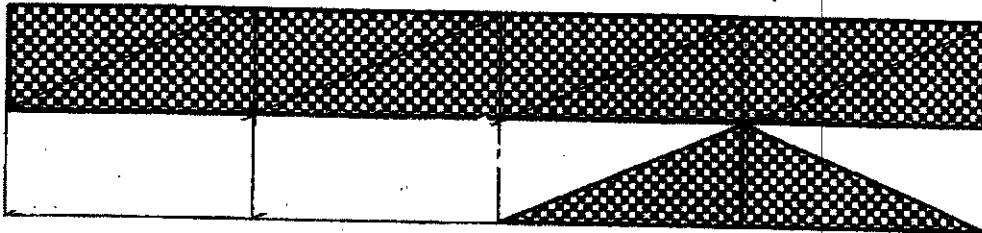
- (1) 3 : 5
- (2) 5 : 3
- (3) 5 : 6
- (4) 6 : 5

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. All diagrams are not drawn to scale. [5 marks]

16. Find the value of $60 \div (15 - 8 + 3) \times 9$.

Ans: _____

17. The figure is made up of rectangles and triangles. What fraction of the figure is shaded? Give your answer as a fraction in its simplest form.



Ans: _____

18. Arrange the following decimals from the smallest to the greatest.

0.19 , 0.2 , 0.189

Ans: _____
smallest greatest

19. The table shows the score of some children in a game. What is their average score?

Name	Score
Jancy	13
Nurul	20
Deven	15
Ping Li	0

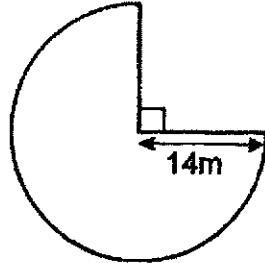
Ans: _____

20. Terry watched a movie which started at 11.45 a.m. The movie lasted 128 minutes. What time did the movie end? Give your answer in 24 h clock.

Ans: _____

Questions 21 to 30 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. All diagrams are not drawn to scale. [20 marks]

21. Find the area of the figure. Take $\pi = \frac{22}{7}$.



Ans: _____ m²

22. The table shows the results of 4 swimmers in a competition.

Name	Timing
Abdul	1 min 5 s
Benjamin	1 min 12 s
Chin Leong	58 s
Deepak	55 s

- (a) Who is the winner in the competition?
 (b) How much faster is the winner compared to the 2nd fastest swimmer?

Ans: (a) _____

(b) _____ s

23. 4 rulers cost as much as y pens. John bought 12 rulers. How many pens could he buy with the same amount of money?

Ans: _____

24. Mrs Krishnan had a piece of ribbon $\frac{3}{8}$ m long. She cut it into $\frac{1}{12}$ m pieces.

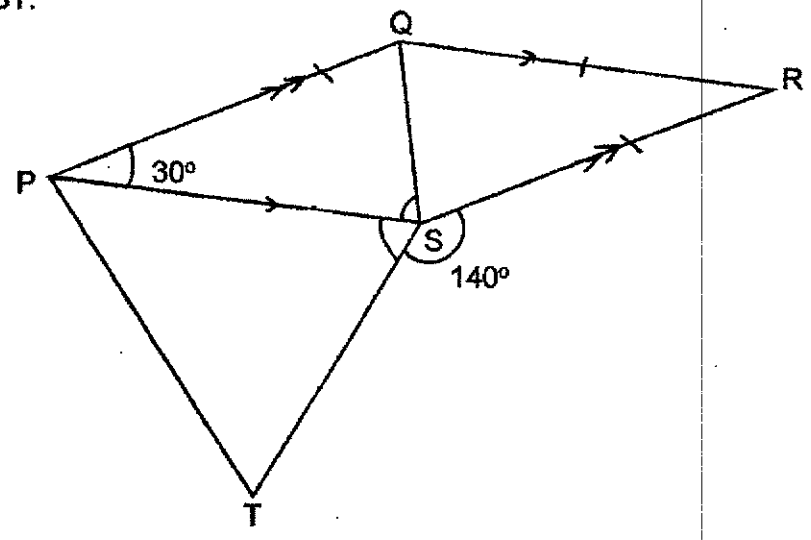
(a) How many $\frac{1}{12}$ m pieces of ribbon were there at most?

(b) What was the length of the piece of ribbon left over? Give your answer in metre as a fraction in its simplest form.

Ans: (a) _____

(b) _____ m

25. PQRS is a rhombus. PST is a triangle. $\angle QPS = 30^\circ$. $\angle RST = 140^\circ$. Find $\angle PST$.



Ans: _____ °

26. The table shows the rate for sending parcels to USA. How much will it cost to send a parcel that weighs 1.3 kg to USA?

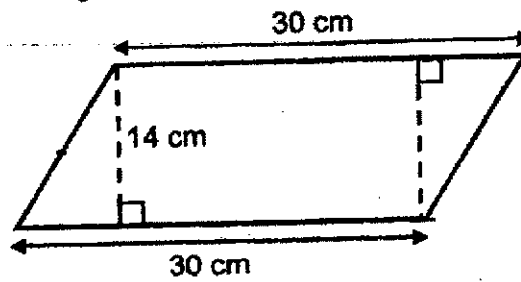
Mass	Cost
First 500 g	\$15
Every subsequent 500 g or part thereof	\$17.50

Ans: \$ _____

27. Mrs Rahman had 1 kg 500 g of flour. She bought another 3.008 kg of flour. She used 1.08 kg of flour for baking. How much flour had she left in the end? Leave your answer in kg.

Ans: _____ kg

28. Find the area of the figure.



Ans: _____ cm²

29. Kovi has some toy cars. If he shares them with 2 or 3 friends, there will be no toy cars left. If he shares them with 4 friends, there will be 1 toy car left. What is the least possible number of toy cars he could have?

Ans: _____

30. A handbag costs \$107 after 20% discount inclusive of 7% GST. What is the original cost of the handbag before GST?

Ans: \$ _____

End of Paper
☺ Please check your work carefully ☺



**RAFFLES GIRLS' PRIMARY SCHOOL
MID-YEAR EXAMINATION
MATHEMATICS (PAPER 2)
PRIMARY 6**

Name: _____ ()

Form class: P6: _____

Math Teacher: _____

Date: 10 May 2021

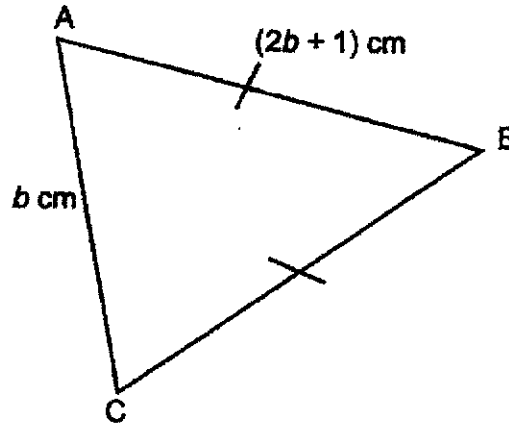
Duration: 1 h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
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3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

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. All diagrams are not drawn to scale. [10 marks]

1. ABC is an isosceles triangle.



- (a) What is the perimeter of the triangle? Leave your answer in terms of b .
 (b) If $b = 10$, what is the perimeter of the triangle?

Ans : (a) _____ cm

(b) _____ cm

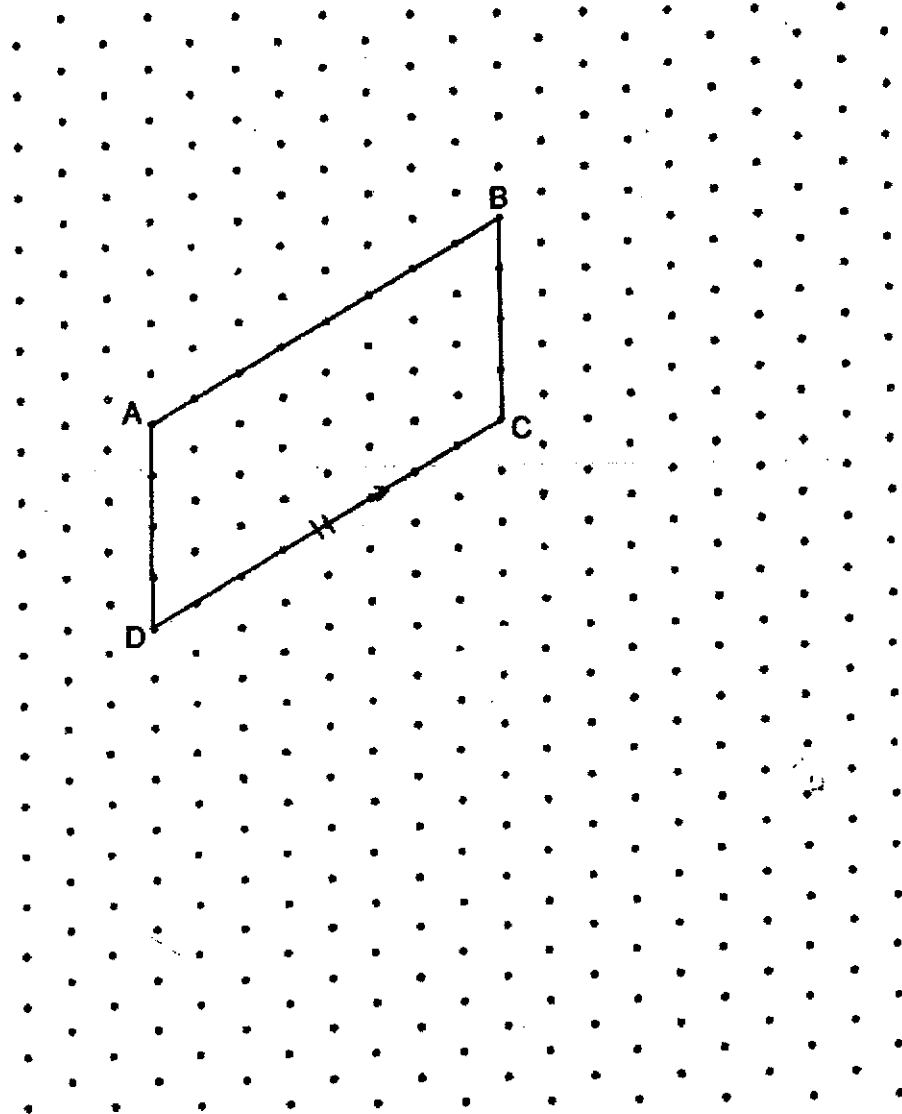
2. $\frac{2}{3}$ of Siti's savings is the same as $\frac{3}{5}$ of Peter's savings. What is the ratio of Siti's savings to Peter's savings?

Ans : _____

3. ABCD is a parallelogram.

(a) Draw and label rectangle CDEF such that it has the same area as ABCD.
The 2 figures should not overlap. [1]

(b) Draw and label an equilateral triangle AGH such that its area is $\frac{1}{4}$ of the area of the parallelogram ABCD. [1]



4. The average height of Jodie, Ken and Larry is 108 cm. Jodie is 138 cm tall. Ken is 97 cm tall. How tall is Larry?

Ans: _____ cm

5. At Joy Bookshop, there were fiction books, non-fiction books and magazines. $\frac{5}{11}$ of the books were fiction books. There were more magazines than non-fiction books. The table shows the prices of the different types of books.

Types of books	Prices
Fiction	\$12
Non-fiction	\$9
Magazines	\$5

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

Statement	True	False	Impossible to tell
a) $\frac{4}{11}$ of the books were magazines.			
b) There were more fiction books than non-fiction books.			
c) The total cost of all the fiction books was less than the total cost of all the non-fiction books and magazines.			

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 the brackets [] at the end of each question or part-question.
All diagrams are not drawn to scale.

[45 marks]

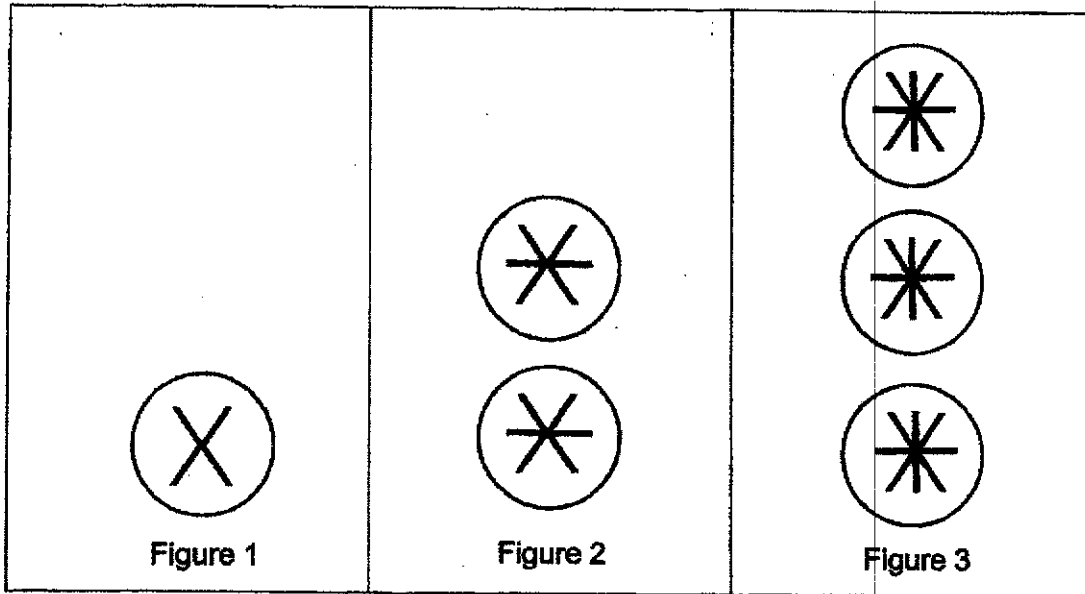
6. At 11 a.m., a car travelled from Town X to Town Y at 80 km/h. At the same time, a lorry travelled from Town Y to Town X at 55 km/h. After travelling for $2\frac{1}{2}$ h, they were still some distance apart. Both vehicles travelled for another 2 h before they met each other.

- (a) What was the distance between both vehicles after $2\frac{1}{2}$ h?
(b) What was the distance between Town X and Town Y?

Ans: (a) _____ [2]

(b) _____ [2]

7. Identical rubber bands and identical toothpicks are used to form figures that follow a pattern as shown. In Figure 1, 2 toothpicks are used to form the cross (X).



- (a) The table shows the number of rubber bands and toothpicks for the first three figures. Complete the table for Figure 4.

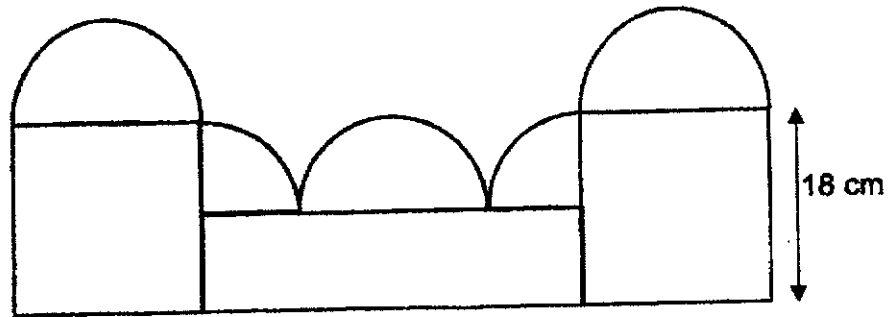
Figure Number	1	2	3	4
Number of circles	1	2	3	
Number of toothpicks in 1 circle	2	3	4	
Total number of toothpicks	2	6	12	

[1]

- (b) A figure has a total of 506 toothpicks. What is the number of circles in this figure?

Ans: (b) _____ [2]

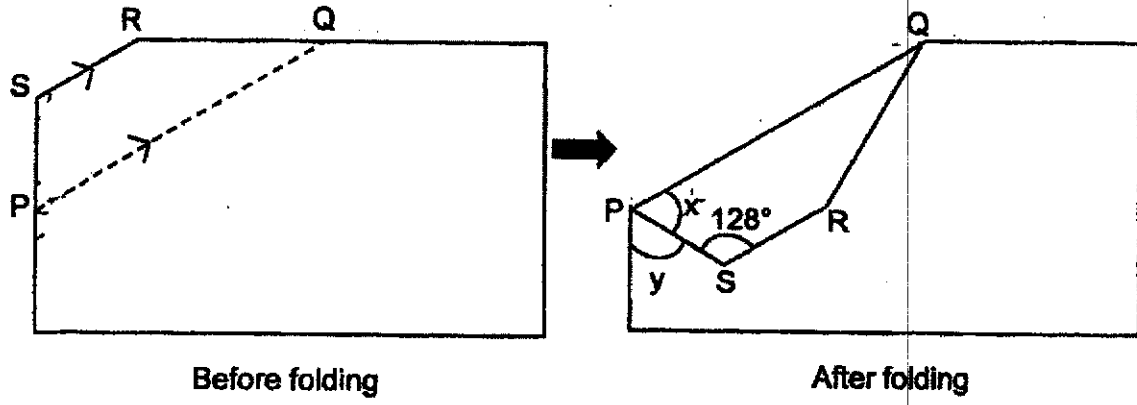
8. The figure is made up of a rectangle, 2 identical quadrants, 2 identical squares and 3 identical semicircles. The breadth of the rectangle is half the length of the square. The length of the square is 18 cm.
- (a) Find the length of the rectangle.
- (b) Use the calculator value of π to find the perimeter of the figure.
- Round your answer to 2 decimal places.



Ans : (a) _____ [1]

(b) _____ [3]

9. A piece of paper is folded along line PQ as shown. Line SR and line PQ are parallel. $\angle PSR = 128^\circ$.
- (a) Find $\angle x$.
- (b) Find $\angle y$.



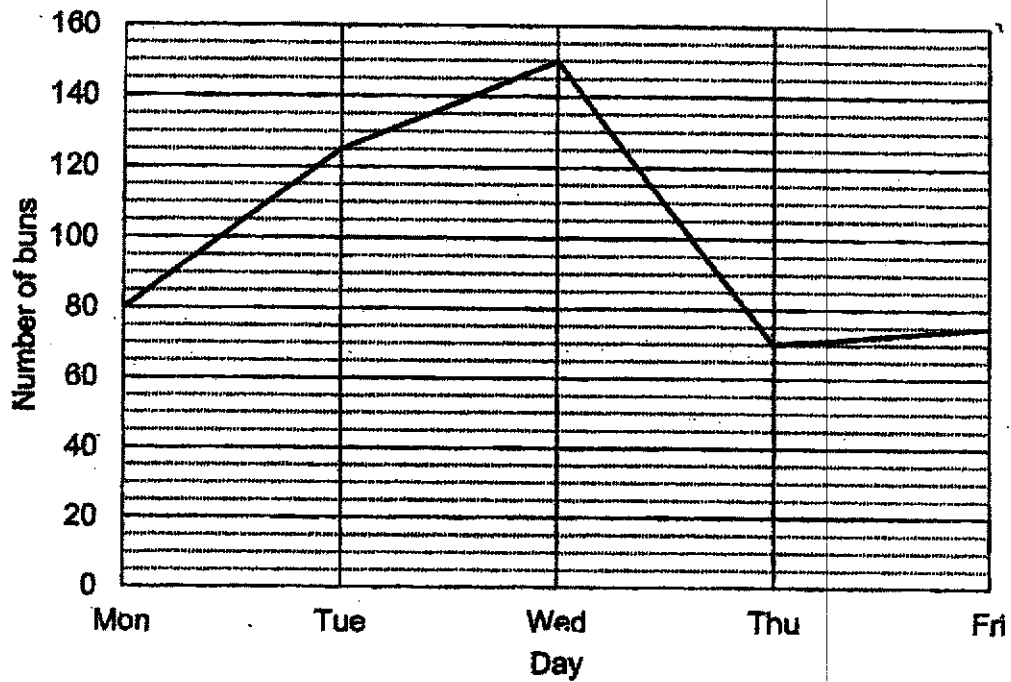
Ans : (a) _____ [1]

(b) _____ [2]

10. James spent all his money on 6 cupcakes and 11 tarts. If he had bought 7 cupcakes and 2 tarts, he would save \$3.60. Each cupcake cost \$1.20 more than each tart. What was the cost of 1 tart?

Ans: _____ [3]

11. The graph shows the number of buns sold in a canteen from Monday to Friday. 500 buns were sold altogether.

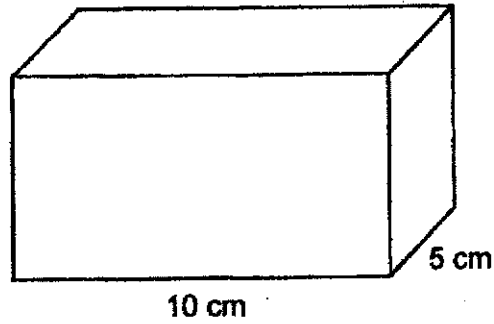


- (a) On which 2 days were the total number of buns sold 30% of the total number of buns sold altogether?
- (b) What was the percentage increase in the number of buns sold from Tuesday to Wednesday?

Ans : (a) _____ and _____ [1]

(b) _____ [2]

12.



The length and the breadth of the cuboid is 10 cm and 5 cm respectively. The height of the cuboid is $\frac{4}{5}$ of the length.

- (a) Find the volume of the cuboid.
- (b) Jessie wants to use some of the above cuboids to form a large cube. What is the least number of cuboids she will need?

Ans: (a) _____ [2]

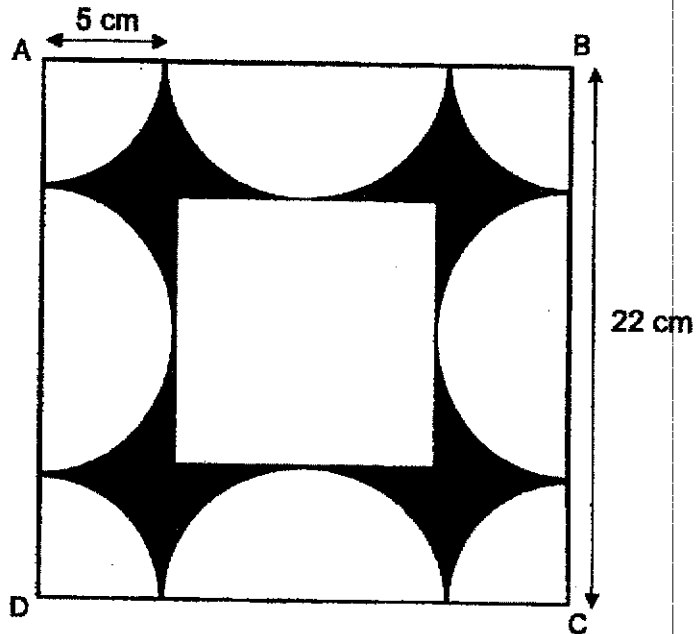
(b) _____ [2]

13. The figure is made up of 2 squares, 4 identical semicircles and 4 identical quadrants. The length of square ABCD is 22 cm.

(a) What is the radius of the semicircle?

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

Take $\pi = 3.14$



Ans: (a) _____ [1]

(b) _____ [3]

14. In January, Ahmad's savings was 20% more than Ben's savings. In February, Ahmad added \$450 to his savings and his total savings increased by 30%.
- (a) What was Ahmad's savings in January?
- (b) What was Ben's savings in January?

Ans: (a) _____ [2]

(b) _____ [2]

15. There were some 20-cent and 50-cent coins in a piggy bank. The total value of all the coins was \$24. There were 8 more 20-cent coins than 50-cent coins. How many 50-cent coins were there?

Ans: _____ [3]

16. Mr Chandra spent $\frac{4}{7}$ of his money on 28 boxes of chocolate. He would need the remaining of his money and \$45 more to buy another 36 boxes of chocolate.

- (a) How much did each box of chocolate cost?
(b) How much did Mr Chandra have at first?

Ans: (a) _____ [3]

(b) _____ [2]

17. The ratio of the amount of David's money to the amount of his sister's money was 5 : 3. They bought a birthday present for their mother. David paid 60% of the cost of the present and his sister paid for the rest of it. After buying the present, David had $\frac{1}{4}$ of his money left while his sister had \$158 left.
- (a) What is the ratio of the amount of money David paid to the amount of money his sister paid? Give your answer in the simplest form.
- (b) How much did his sister pay for the present?

Ans: (a) _____ [1]

(b) _____ [4]

End of Paper
Please check your work carefully ☺

ANSWER KEY

YEAR : 2021
LEVEL : PRIMARY 6
SCHOOL : RGPS
SUBJECT : MATHEMATICS
TERM : MID-YEAR EXAM

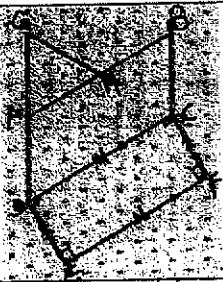
PAPER 1

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

Q16	54
Q17	$\frac{10}{16} = \frac{5}{8}$
Q18	0.189, 0.19, 0.2
Q19	$13 + 20 + 15 = 48$ $\sqrt{48} = 12$
Q20	1353
Q21	$\frac{3}{4} \times \frac{22}{7} \times 14 \times 14 = 462\text{m}^2$
Q22	a) Deepak b) $58\text{s} - 55\text{s} = 3\text{s}$
Q23	$4R = yp$ $12R = y \times 3$ $= 3y$
Q24	a) $\frac{3}{8} \div \frac{1}{12} = \frac{3}{8} \times \frac{2}{1}$ $= \frac{9}{2} = 4\frac{1}{2}$ ANS: 4 b) $\frac{1}{2} \times \frac{1}{12} = \frac{1}{24}\text{m}$
Q25	$\angle PQS = \frac{180^\circ - 30^\circ}{2} = 75^\circ$ $\angle PST = 360^\circ - 140^\circ - 75^\circ - 75^\circ = 70^\circ$
Q26	$1.3\text{kg} = 1300\text{g}$

	$500g = 15$ $2 \times 17.50 = 35$ $35 + 15 = \$50$
Q27	$1kg500g = 1.5kg$ $1.5 + 3.008 = 4.508$ $4.508 - 1.08 = 3.428kg$
Q28	$30 \times 14 = 420 \text{ cm}^2$
Q29	36
Q30	$107 \div 107 = 1$ $1 \times 100 = 100$ $100 \div 80 = 1.25$ $1.25 \times 100 = \$125$

PAPER 2

Q1	a) $2b + 1 + b + 2b + 1 = (5b + 2)cm$ b) $2 \times 10 = 20$ $20 + 10 + 20 + 1 + 1 = 52cm$
Q2	9:10
Q3 a) b)	
Q4	$108 \times 3 = 324$ $324 - 138 - 97 = 89cm$
Q5	a) Impossible to tell b) True c) False
Q6	a) The distance between both vehicles after $2\frac{1}{2}$ is 270km. Distance Car after $2\frac{1}{2}h = 2\frac{1}{2} \times 80 = 200$ Distance Lorry = $55 \times 2\frac{1}{2}$ After $2\frac{1}{2} = 137.5$ Distance gap = $607.5 - 137.5 - 200 = 270km$ b) The distance between X and Y is 607.5km $4\frac{1}{2} \times 135 = 607.5km$

Q7 a)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Figure Number</th> <th style="width: 12.5%;">1</th> <th style="width: 12.5%;">2</th> <th style="width: 12.5%;">3</th> <th style="width: 12.5%;">4</th> </tr> </thead> <tbody> <tr> <td>Number of circles</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>Number of toothpicks in 1 circle</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Total number of toothpicks</td> <td>2</td> <td>6</td> <td>12</td> <td>20</td> </tr> </tbody> </table>	Figure Number	1	2	3	4	Number of circles	1	2	3	4	Number of toothpicks in 1 circle	2	3	4	5	Total number of toothpicks	2	6	12	20
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Total number of toothpicks	2	6	12	20																	
b)	$22 \times 23 = 506$ ANS : 22																				
Q8	<p>a) Breadth of rect = $18 \div 2 = 9$ Length of rect = $9 + 18 + 9 = 36\text{cm}$</p> <p>b) Circumference of two circles = $2 \times 9 \times 2 \times \pi = 36 \pi$ Perimeter = $36 \pi + 18 + 18 + 36 + 18 + 18$ = $36 \pi + 108$ = 221.10cm</p>																				
Q9	<p>a) $\angle X = 180^\circ - 128^\circ = 52^\circ$ b) $\angle y = 180^\circ - 52^\circ - 52^\circ = 76^\circ$</p>																				
Q10	$8T = 3.60 + 1.20 = 4.80$ $T = 4.80 \div 8 = \$0.60$																				
Q11	<p>a) $30\% \times 500 = 150$ $70 + 80 = 150$ ANS : MONDAY and THURSDAY</p> <p>b) $150 - 125 = 25$ $\frac{25}{125} \times 100\% = 20\%$</p>																				
Q12	<p>a) Height of cuboid = $\frac{4}{5} \times 10 = 8$ Volume of cuboid = $10 \times 5 \times 8 = 400$ The volume is 400cm^3</p> <p>b) $40 \div 5 = 8$ $40 \div 10 = 4$ $40 \div 8 = 5$ $8 \times 4 \times 5 = 160$</p>																				
Q13	<p>a) Radius of semicircle = $(22 - 5 - 5) \div 2 = 6$ The radius of the semicircle is 6cm.</p> <p>b) Length of small square = $22 - 6 - 6 = 10$ Area of small square = $10 \times 10 = 100$ Area of shaded = $484 - 100 - 78.5 - 226.08 = 79.42\text{cm}^2$</p>																				
Q14	<p>a) Ahmad's Savings in Feb = $130\% \times 120 = 156$ 30% of Ahmad's savings = 450</p>																				

	<p>1% of Ahmad's savings = $450 \div 30 = 15$ Ahmad's savings in Jan = $15 \times 100 = \\$1500$</p> <p>b) 120% of Ben's savings = 1500 1% of Ben's savings = $1500 \div 120 = 12.5$ 100% of Ben's savings = $12.5 \times 100 = \\$1250$</p>										
Q15	<p>$8 \times 0.2 = 1.6$ $24 - 1.6 = 22.4$ $0.5 + 0.2 = 0.7$ $22.4 \div 0.7 = 32$</p>										
Q16	<p>a) $4u = 28$ $3u + 45 = 36$ $1u = 28 \div 4 = 7$ $3u = 7 \times 3 = 21$ $36 - 21 = 15$ Cost of 15 boxes = 45 Cost of 2 box = $45 \div 15 = 3$ ANS: \$3</p> <p>b) $\frac{4}{7}$ of money = $28 \times 3 = 84$</p> <p>$\frac{1}{7}$ of money = $84 \div 4 = 21$ money = $21 \times 7 = \\$147$</p>										
Q17	<p>a) David's 5 : Sister 3 = 10 : 6 $\rightarrow 2.5 \times 2 = 5$ $\frac{3}{4}$ of David's money = $\frac{3}{4} \times 5 = 3.75$ = 60% of present 1% of present = $3.75 \div 60 = 0.0625$ 40% of present = $0.0625 \times 40 = 2.5$</p> <table border="1" data-bbox="443 1435 810 1659"> <thead> <tr> <th>David's</th> <th>Sister</th> </tr> </thead> <tbody> <tr> <td>3.75</td> <td>2.5</td> </tr> <tr> <td>375</td> <td>250</td> </tr> <tr> <td>75</td> <td>50</td> </tr> <tr> <td>3</td> <td>2</td> </tr> </tbody> </table> <p>ANS : The ratio is 3 : 2</p> <p>b) $6 - 5 = 1$ $1u = 158$ $5u = 158 \times 5$ = \$790</p>	David's	Sister	3.75	2.5	375	250	75	50	3	2
David's	Sister										
3.75	2.5										
375	250										
75	50										
3	2										

h
ZWP