RAFFLES GIRLS' PRIMARY SCHOOL
WEIGHTED ASSESSMENT 2 2023
MATHEMATICS
PRIMARY 6

Name: _____ ( )

Form Class: P6 _____

Math Teacher: _____

Date: 2 May 2023

Duration: 50 minutes

Total Score (Out of 30 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. The use of calculator is allowed for this paper.

Questions **1** and **2** carry 1 mark each and Questions **3** to **9** 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. [16 marks]

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1. What is the missing number in the box?

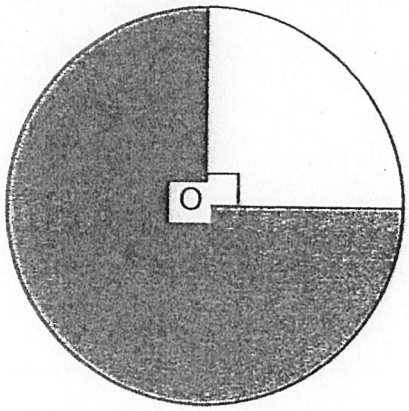
   $18 : \square = 3 : 4$

Ans: _____ [1]

2. There are 60 marbles in a box. 16 marbles are blue and the rest are green. What is the ratio of the number of blue marbles to the number of green marbles? Give your answer in the simplest form.

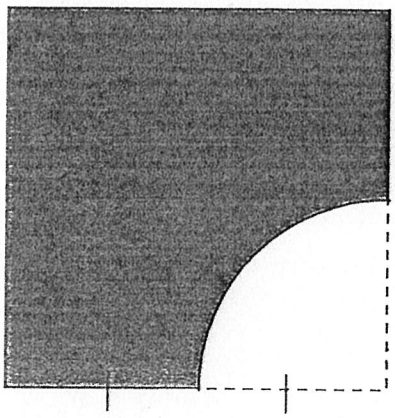
Ans: _____ [1]

3. In the figure, O is the centre of the circle with a diameter of 12 cm. Find the area of the shaded part.
(Take $\pi = 3.14$)



Ans: _____ cm^2 [2]

4. The figure is made up of a square and a quadrant. The length of the square is 42 cm. Find the perimeter of the shaded part.
(Take $\pi = \frac{22}{7}$)



Ans: _____ cm [2]

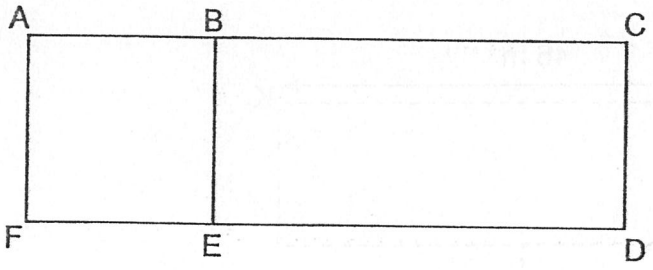
5. The ratio of the number of men to women to children at a concert was 5 : 12 : 8. There were 1200 people at the concert altogether. How many children were at the concert?

Ans: _____ [2]

6. In a fruit stall, $\frac{2}{7}$ of the number of apples is equal to $\frac{1}{6}$ of the number of oranges. What is the ratio of the number of apples to the number of oranges?

Ans: _____ [2]

7. Figure ACDF is made up of a square and a rectangle. The ratio of the length of AB to the length of BC is 1 : 2. The perimeter of rectangle ACDF is 160 cm. Find the area of square ABEF.

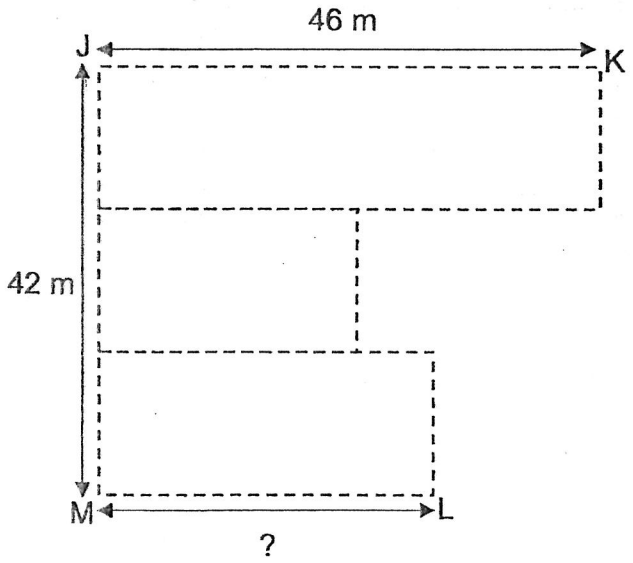


Ans: _____ cm^2 [2]

8. The ratio of the number of pies to the number of buns at a bakery was 8 : 3. After 203 pies were sold, the ratio of the number of pies to the number of buns became 3 : 2. How many buns were there at the bakery?

Ans: _____ [2]

9. A plot of land is divided into three rectangular fields of equal width. JM = 42 m and JK = 46 m. The fields are fenced using 252 m of fencing, indicated by ------ in the figure. Find the length of ML.



Ans: _____ m [2]

For questions **10** to **13**, show your working 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. [14 marks]

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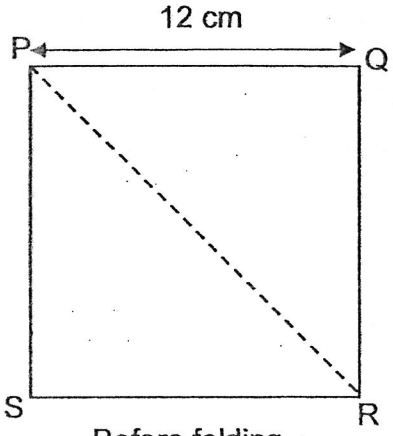
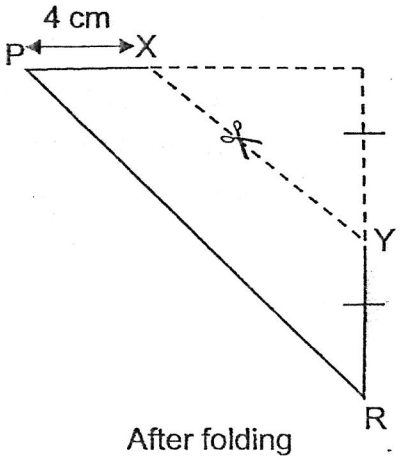
10. Salim baked some cookies. He ate $\frac{1}{4}$ of the cookies. The rest of the cookies were given to Alex, Bala and Caili in the ratio of 9 : 5 : 4. The number of cookies Alex received was 145 more than the number of cookies Caili received. How many cookies did Salim bake?

Ans: _____ [3]

11. Lily has a piece of square paper, PQRS. She folded the paper into 2 equal halves along PR as shown. She then cut off the corners along XY. Find the area of the remaining paper.



Before folding



After folding

Ans: _____ [3]

12. Alan, Ben, and Chandra shared the cost of a present for their cousin. Alan paid $\frac{1}{5}$ of the total amount. Ben paid $\frac{3}{5}$ of the total amount Alan and Chandra paid.

(a) What is the ratio of the amount Alan paid to the total amount Ben and Chandra paid?

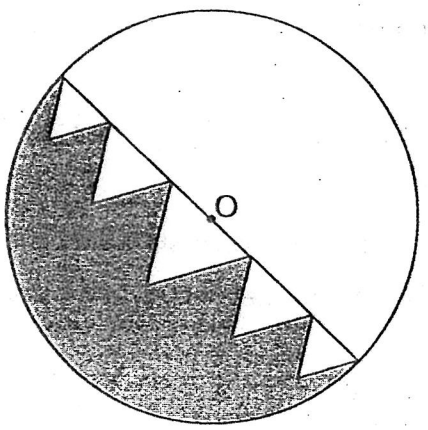
Give your answer in the simplest form.

(b) Given that the present cost $224, how much did Chandra pay for the present?

Ans: (a) _____ [1]

(b) _____ [3]

13. The figure is made up of 5 equilateral triangles and a circle. O is the centre of the circle with diameter 30 cm.



(a) Find the circumference of the circle.

(b) Find the perimeter of the shaded part. Round your answer to the nearest centimetre.

(Take $\pi = 3.14$)

Ans: (a) _____ [1]

(b) _____ [3]

END OF PAPER

WEIGHTED ASSESSMENT 2

Q1	24	Q2	Blue : 16 Green : 60 – 16 = 44 B : G 16 : 44 4 : 11 The ratio of the number of blue marbles to the number of green marbles is 4 : 11
Q3	$\frac{3}{4}$ x 3.14 x 6 x 6 = 84.78cm^2	Q4	Arc length of quadrant = $\frac{1}{4}$ x $\frac{22}{7}$ x 42 = 33 Perimeter = 33 + 21 + 21 + 42 + 42 = 159cm
Q5	M : W : C 5 : 12 : 8 12u + 5u + 8u = 25u 25u = 1200 1u : 48 8u = 384	Q6	$\frac{2}{7}$ A = $\frac{1}{6}$ Orange $\frac{2}{7}$ A = $\frac{2}{12}$ Orange A : O 7 : 12 The ratio of the number of apples to the number of oranges is 7 : 12
Q7	Total = 1u + 1u + 1u + 1u + 2u + 2u = 8u 8u = 160 1u = 20 Area of square ABEF = 20 x 20 = 400cm^2	Q8	Before P : B 8 : 3 16 : 6 After 3 : 2 9 : 6 16u – 9u = 7u 7u = 203 1u = 29 6u = 174 buns
Q9	46 + 14 + 14 + 46 = 120 120 + 14 + 14 = 148 252 – 148 = 104 Length of ml = $\frac{104-14-14}{2}$ = 38ml	Q10	A : B : C 9 : 5 : 4 9u – 4u = 5u 5u = 145 1u : 29 9u + 5u + 4u = 18u 18u = 522 3P = 522 1P = 174 4p = 696 cookies

Q11

Area after folding = $\frac{12 \times 12}{2}$

= 72

Area of triangle A = $\frac{1}{2}$ x 6 x 8

= 24

72 – 24 = 48

48 x 2 = 96

The area of the remaining paper is 96cm^2

Q12

(a)

A : B + C	Total	B : A + C	Total
1 : 4	5	3 : 5	8
8 : 32	40	15 : 25	40

40u = 224

1u = 5.6

17u = 5.6 x 17

= 95.2

Ans : (a) 1 : 4

(b) $95.20

Q13

(a) 3.14 x 30 = 94.2

(b) 30 x 2 = 60

Arc length of semicircle = $\frac{1}{2}$ x 3.14 x 30

= 47.1

Perimeter of shaded part = 47.1 + 60

≈ 107.1

= 107

Ans :

(a) 94.2cm

(b) 107cm

END

Pg 3