

Name: $\qquad$
Form Class: P6 $\qquad$
$\qquad$ ( )

Date: 2 May 2023

## RAFFLES GIRLS' PRIMARY SCHOOL WEIGHTED ASSESSMENT 22023 MATHEMATICS PRIMARY 6

Math Teacher: $\qquad$
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.

1. What is the missing number in the box?
$18: \square=3: 4$

Ans:
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: $\qquad$ [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: $\qquad$ $\mathrm{cm}^{2}$ [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: $\qquad$ 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:
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: $\qquad$
7. Figure $A C D F$ is made up of a square and a rectangle. The ratio of the length of $A B$ to the length of $B C$ is $1: 2$. The perimeter of rectangle $A C D F$ is 160 cm . Find the area of square $A B E F$.


Ans: $\qquad$ $\mathrm{cm}^{2}$ [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:
9. A plot of land is divided into three rectangular fields of equal width. JM $=42 \mathrm{~m}$ and $\mathrm{JK}=46 \mathrm{~m}$. The fields are fenced using 252 m of fencing, indicated by in the figure. Find the length of ML.


Ans: $\qquad$ 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.
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: $\qquad$ [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.


Ans: $\qquad$
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) $\qquad$ [1]
(b) $\qquad$ [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) $\qquad$ [1]
(b) $\qquad$ [3]

SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : WA2 2023

| 1) | $\begin{aligned} & 18 \div 3=6 \\ & 4 \times 6=24 \end{aligned}$ |
| :---: | :---: |
| 2) | $\begin{aligned} & \mathrm{B}: \\ & 16: \\ & \hline 4: \\ & 4 \end{aligned}$ |
| 3) | $\begin{aligned} & 12 \div 2=6 \\ & 3 / 4 \times 3.14 \times 6 \times 6=84.78 \mathrm{~cm} 2 \end{aligned}$ |
| 4) | $\begin{aligned} & 42 \div 2=21 \\ & 21 \times 2=42 \\ & 1 / 4 \times \frac{22}{7} \times 42=33 \\ & 42+21+33+21+42=159 \mathrm{~cm} \end{aligned}$ |
| 5) | $\begin{aligned} 25 u & =1200 \\ U & =1200 \div 25=48 \\ 8 u & =8 \times 48=384 \end{aligned}$ |
| 6) | 7:12 |


| 7) | $\begin{aligned} & 8 \mathrm{u}=160 \\ & \mathrm{U}=20 \\ & 20 \times 20=400 \mathrm{~cm} 2 \end{aligned}$ |
| :---: | :---: |
| 8) | $\begin{aligned} & 16 u-9 u=203 \\ & 7 u=203 \\ & U=203 \div 7=29 \\ & 6 u=6 \times 29=124 \end{aligned}$ |
| 9) | $\begin{aligned} & 43 \div 3=14 \\ & 42+42+46+46=176 \\ & 252-176=786 \\ & 76 \div 2=38 m \end{aligned}$ |
| 10) | $\begin{aligned} & 9 u-4 u=145 \\ & 5 u=145 \\ & U=145 \div 5=29 \\ & 24 u=24 \times 29=696 \end{aligned}$ |
| 11) | $\begin{aligned} & 12-4=8 \\ & 12 \div 2=6 \\ & 12 \times 12=144 \\ & 6 \times 8 \div 2=24 \\ & 24 \times 2=48 \\ & 144-48=96 \mathrm{~cm} 2 \end{aligned}$ |


| 11) | a) $1: 4$ <br> b) $40 \mathrm{u}=224$ <br> $17 \mathrm{u}=224 \div 40 \times 17=\$ 95.20$ |
| :--- | :--- |
| 12) | $\left.\begin{array}{l}\text { a) } 3.14 \times 30=94.2 \mathrm{~cm} \\ \\ \\ \\ \\ \\ \\ \\ \\ \hline\end{array}\right) 94.2 \div 2=47.1+30+30=107 \mathrm{~cm}$ |

