## Primary Five <br> Mathematics <br> Semestral Assessment One

## Section A

I. Question 1 to 5 carry 1 mark each. Questions 6 to 15 carry 2 marks each. Choose the correct answer for each question and write its number ( $1,2,3$ or 4 ) in the boxes provided.

1. Find the value of $36+27 \div 9-6$.
(1) 1
(2) 18
(3) 21
(4) 33

2. Which of the following fractions has 16 sixths?
(1) $2 \frac{2}{3}$
(2) $4 \frac{1}{2}$
(3) $8 \frac{3}{4}$
(4) $16 \frac{1}{6}$

3. Which one of the following is greater than $1 / 2$ ?
(1) $\quad 4 / 11$
(3) $10 / 21$
$\begin{array}{ll}\text { (2) } & 5 / 9 \\ \text { (4) } & 11 / 23\end{array}$

4. A jar contains 6 litres of water. It can fill 8 mugs to the brim. How many litres of water can each mug hold?
(1) $3 / 41$
(2) $1 \frac{1}{3} /$
(3) 14 I
(4) 48 /
$\square$
5. Aunt Leela bought a piece of cloth measuring 5 m by 8 m . Find the maximum number of rectangles measuring 3 m by 2 m that can be cut from the cloth.
(1) 7
(2) 6
(3) 5
(4) 4
6. In 7125023 , the value of 2 in the ten thousands place is $\qquad$ times the value of 2 in the tens place.
(1) 10
(2) 100
(3) 1000
(4) 10000

7. 84 cm as a fraction of 1 km in its simplest form is $\qquad$ .
$\begin{array}{ll}\text { (1) } & 21 / 25 \\ \text { (3) } & 21 / 2500\end{array}$
$\begin{array}{ll}\text { (2) } & 21 / 250 \\ \text { (4) } & 21 / 25000\end{array}$
8. Mary had $3 \frac{1}{2} / 2 \mathrm{~m}$ of ribbon. Lynette had ${ }^{2} / 3 \mathrm{~m}$ of ribbon. How much more ribbon did Mary have?
(1) $2 \frac{1}{6} \mathrm{~m}$
(2) $25 / 6 \mathrm{~m}$
(3) $3 \frac{1}{6} \mathrm{~m}$
(4) $3 \frac{5}{6} \mathrm{~m}$
$\square$
9. The sum of two numbers is 124 . The difference between the two numbers is 36 . Find the greater number.
(1) 44
(2) 62
(3) 80
(4) 98
$\square$
10. Find the area of the figure below.

(1) $25 \mathrm{~m}^{2}$
(2) $30 \mathrm{~m}^{2}$
(3) $40 \mathrm{~m}^{2}$
(4) $45 \mathrm{~m}^{2}$
$\square$
11.Points $A$ and $B$ are mid-points of the square shown in the figure. What area of the square is shaded?

(1) $25 \mathrm{~cm}^{2}$
(2) $50 \mathrm{~cm}^{2}$
(3) 75 cm
(4) $100 \mathrm{~cm}^{2}$

11. The two figures below have the same area. Find the side of the square.

(1) 6 cm
(2) 9 cm
(3) 24 cm
(4) 36 cm

12. In a class of 42 pupils, 18 pupils wear glasses. What is the ratio of the number of pupils who wear glasses to the number of pupils who do not wear glasses?
(1) $3: 4$
(2) $4: 3$
(3) $3: 7$
(4) $7: 3$

13. In a cupboard, there are cups, bowls and plates. The ratio of the number of cups to the number of bowls is $5: 3$. the ratio of the number of bowls to the number of pieces of plates is $1: 7$. What is the ratio of the number of cups to the total number of pieces of crockery in the cupboard?
(1) $1: 3$
(2) $1: 10$
(3) $5: 13$
(4) $5: 29$
14. The time shown on the clock in the figure is 2.45 p.m. The larger angle formed by the hour and minutes hand is between $\qquad$ .
(1) $45^{\circ}$ and $90^{\circ}$
(2) $90^{\circ}$ and $135^{\circ}$
(3) $135^{\circ}$ and $180^{\circ}$
(4) $180^{\circ}$ and $225^{\circ}$
$\square$

## Section B

II. For each question, write your answer in the space provided. Give your answer in the unit stated. ( 20 X 1 Marks)
16. $\quad$ In $971020=970000+$ box is $\qquad$ .
$\square$ +20 , the missing number in the
$\qquad$
17. What is 7684 divided by 32 ? Express your answer as a mixed number in the simplest form.
18. 79 hundreds is $\qquad$ more than 97 tens
19. $\square$
What is the missing number in the box?
$\square$
20. Michael has 32 marbles and Jim has twice as many marbles as Michael. How many marbles does Jim have to give to Michael so that they have an equal number of marbles?
21. What fraction of the figure is shaded? Express your answer in the simplest form.

22. $1 / 8+1 / 8+1 / 8+1 / 8+1 / 8=1 / 8+\square X 1 / 8$

The missing number in the box is $\qquad$ .
$\square$
23. In $12 \frac{1}{5}=9+\frac{\square}{5}$, the missing number in the box is $\qquad$ .

24. Find the value of $5 / 7 \div 35$.
$\square$
25. Evaluate $15 \times 6-(24 \times 2)$
$\square$
26. Express 50 minutes as a fraction of $11 / 5$ hours.
27. The figure shown is made up of 4 identical triangles. Find the area of each triangle.

28. The perimeter of the triangle $A B C$ is 31 cm . Find the area of the shaded part.


Use the information below to answer question 29 and 30. Figures A, B, C and D are shown in the grid below.

29. Which figure have the same area?
$\square$
30. How much greater is the perimeter of $A$ than the perimeter of $C$ ?
$\square$
31. The ratio of June's money to Ruth's money is $3: 5$. If June has $\$ 24$, how much money does Ruth have?

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32. The ratio of three sides of a triangle is $2: 3: 5$. If the perimeter of the triangle is 64 cm , find the longest side of the triangle.
33. The points $A, B, C$ and $D$ are on a straight line. The ratio of $A B$ to $A C$ is $1: 2$. The ratio of $A D: C D$ is $2: 1$. What is the ratio of $A B$ to $A D$ ?
A
B
C
D

34. In the figure, $A B C$ is a straight line. Find the total value of $x$ and $y$.

35.EFG and QFT are straight lines. Find a.

$\square$

## Section C (12 Marks)

III. For each question, show your working clearly in the space below each question and write your answers in the spaces provided. The mark for each question is given in the brackets.
36. Ali, Muthu and Don paid a total of $\$ 1998$ for a computer. Ali and Muthu each paid an equal amount while Don paid $\$ 102$ less than Ali. How much did Ali pay?

Answer: $\qquad$ (2 marks)
37. A fruit seller bought 800 strawberries for $\$ 56$. He packed them into boxes of 10 and decided to sell each box of strawberries at $\$ 3$. How much would he make if he sold all the strawberries?

Answer: $\qquad$ (2 marks)
38. 390 people attended a fair. 120 were women, 60 were men and the rest were children. What fraction of the people who attended the fair were children? Express your answer in the simplest form.

Answer: $\qquad$ (2 Marks)
39. A basket containing 5 packets of biscuits weighs 900 g . The 5 packets of biscuits are of the same weight. The weight of the basket is half that of the 5 packets of biscuits. What is the weight of 1 packet of biscuits?
40. Josephine bought 6 m of cloth to make a skirt and 3 blouses. She used $13 / 8 \mathrm{~m}$ for the skirt and $1 / 3 \mathrm{~m}$ for each blouse. How much cloth had she left? Express your answer to the nearest centimetre.

Answer: $\qquad$ (3 Marks)
41. Kate has 128 more American coins than Japanese coins and twice as many Singapore coins as Japanese coins. If $1 / 8$ of Kate's coins is Japanese coins, how many coins does Kate have altogether?
42. a. Use the grid below to plot the points. Name and join the points in order.

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A(1,1) ; B(5,2) ; C(5,7) ; D(1,4) ; A(1,1)
$$


b. Use a protractor to measure BCD.
c. If you are standing at D and facing north, in what direction is point C?

Answer: $\qquad$ (1 Mark)

Answer: $\qquad$ (1 Mark)
43. A man bought 79 / of paint to paint his house. He needed 15 / for the living room and ${ }^{1} / 3$ as much for the study room. If he divided the rest of the paint equally for his 4 remaining bedroom, how much paint did he use for each bedroom? Express your answer in litres and millilitres.
$\qquad$
44. In the figure below, the ratio of the length of $A B$ to the length of $C D$ is 3: 2. $A B$ is $6 \mathrm{~cm}, \mathrm{BC}$ is 8 cm and $C E$ is 11 cm . Find the total area of the shaded triangles.


Answer: $\qquad$ (4 Marks)
45. A fish and 2 kg of prawns cost $\$ 45$. The prawns cost $\$ 17.50$ per kg . Miss Salma bought 3 kg of prawns and 3 similar fish.
a. How much did Miss Salma pay for 1 fish?
b. What was the total amount Miss Salma paid for the 3 kg of prawns and 3 similar fish?
$\qquad$ (2 Marks)

Answer: $\qquad$ (2 Marks)
46. In basket A, there were 480 bean bags and in basket B, there were 60 bean bags. When an equal number of bean bags was added into each basket, the ratio of the number of bean bags in basket $A$ to the number of bean bags in basket $B$ is $4: 1$. What was the total number of bean bags added to both baskets?
$\qquad$ (4 Marks)
47. The figure $A B C D$ is made up of 4 rectangles of the same size. The perimeter of $A B C D$ is 120 cm .
a. Find the length of the figure $A B C D$.
b. Find the area of $A B C D$.


Answer: a) $\qquad$ (3 Marks)
b) $\qquad$ (2 Marks)
48. In the figure below, two different triangles overlapped to form a square. $A B=C D=6 \mathrm{~cm}$.
a. Find the area of the square
b. Find the area of the unshaded part.


Answer: a) $\qquad$ (1 Marks)
b) $\qquad$ (4 Marks)
49. A florist sells orchids, roses and marigolds. For every 5 stalks of orchids, there are 7 stalks of roses. For every 5 stalks of marigold, there are 4 stalks of roses.
a. Find the ratio of the stalks of orchids to the stalks of roses to the stalks of marigolds.
b. After 54 stalks of orchids were sold, $2 / 11$ of the remaining flowers were orchids. How many stalks of orchid were left?

Answer: a) $\qquad$ (2 Marks)
b) $\qquad$ (3 Marks)
50. Mr Lee saved $\$ 125$ every month for 2 years. He then used $2 / 5$ of his total savings to buy a hi-fi system and $1 / 6$ of the remainder to buy DVD player. If he gave away $1 / 4$ of the remaining savings to a charitable organization, how much did he give to the organization?

Answer: $\qquad$ (5 Marks)

