## Primary Six <br> Mathematics Continual Assessment Two

Section A: Questions 1-5 carry 1 mark each. Questions 6-15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Mark your choice [1, 2, 3, 4] in the given box.

1. What is the missing number in the blank space?
$96304=90000+$ $\qquad$ $+300+4$
(1) 6
(2) 60
(3) 600
(4) 6000
$\square$
2. What is the number represented by the letter A?

(1) 17.3
(2) 17.075
(3) 17.375
(4) 17.75
$\square$
3. The line graph below shows the distance traveled by John over a period of time.


How long did John take to travel $13 / 4 \mathrm{~km}$ ?
(1) 60 km
(2) 75 km
(3) 90 km
(4) 105 km
4. The figure shows a solid.


Which of the following is a net of the solid?
(1)

(2)

(3)

(4)

5. Find the value of $2 x^{2}-8+3 x$ if $x=3$.
(1) 7
(2) 13
(3) 19
(4) 29

6. Tom ate $1 / 2$ of the chicken pie in the morning. In the afternoon, Ben ate ${ }^{5} / 8$ of what is left. What fraction of the pie was left at the end of the day?
(1) $1 / 5$
(2) $3 / 8$
(3) $3 / 16$
(4) $5 / 16$
7. A box carrying 6 identical storybooks weighs 2.7 kg . The same box carrying 7 identical storybooks weighs 3.04 kg . How many kilograms does the box weigh?
(1) 0.34
(2) 0.63
(3) 0.66
(4) 0.97
$\square$
8. Given that the side of each square is 1 cm , what is the area of the shaded region?

(1) $10 \mathrm{~cm}^{2}$
(2) $7 \mathrm{~cm}^{2}$
(3) $6 \mathrm{~cm}^{2}$
(4) $5 \mathrm{~cm}^{2}$
9. A water tank of base 40 cm by 20 cm and height 12 cm is $65 \%$ filled with water. How much more water is needed to fill the tank completely?
( $1 \ell=1000 \mathrm{~cm}^{3}$ )
(1) $3.36 \ell$
(2) $4.36 \ell$
(3) $5.24 \ell$
(4) $6.24 \ell$
10. The pie chart shows the number of students who took part in the events of the sports meet.

Track and Field

$1 / 2$ of the students took part in Track and Field. 120 students took part in Swimming. How many students took part in High Jump?
(1) 40
(2) 60
(3) 90
(4) 120
$\qquad$
11. A cyclist cycled from Point A to Point B. For the first $\frac{3}{4}$ of the trip, he took a total of 3 hours. For the rest of the trip which took 2 hours, he traveled at an average speed of $60 \mathrm{~km} / \mathrm{h}$. What was his average speed for the whole trip?
(1) $90 \mathrm{~km} / \mathrm{h}$
(2) $96 \mathrm{~km} / \mathrm{h}$
(3) $120 \mathrm{~km} / \mathrm{h}$
(4) $180 \mathrm{~km} / \mathrm{h}$
12. The ratio of Joyce and Jessie's savings is $2: 3$. They decide to share the cost of a new table for their new house. The ratio of Joyce's share to Jessie's share is $4: 7$. After they bought the table, each girl was left with $\$ 100$ each. How much savings did Joyce have at first?
(1) $\$ 75$
(2) $\$ 250$
(3) $\$ 300$
(4) $\$ 450$
$\square$
13. A train travels at a constant speed of $t \mathrm{~km} / \mathrm{h}$. How long will it take to travel ${ }^{2} / 3 \mathrm{~km}$ ?
(1) $2 t / 3$ hour
(2) $3 t$ hour
(3) ${ }^{20} / \mathrm{t}$ mins
(4) $40 / \mathrm{m}$ mins
14. The figure below is not drawn to scale. Given that ABCDE is a square and $B D C$ is an equilateral triangle, $A B C$ is an isosceles triangle. Find $\angle \mathrm{EAC}$.

(1) $15^{\circ}$
(2) $60^{\circ}$
(3) $75^{\circ}$
(4) $150^{\circ}$
$\square$
15. The usual selling price of a computer is $\$ 2502.50$. During the Great Singapore Sale, it was sold at a discount of $20 \%$ and the store still gained a profit of $10 \%$. What was the cost price of the computer?
(1) $\$ 1785$
(2) $\$ 1820$
(3) $\$ 1845$
(4) $\$ 2002$

Section B: Questions 16-35 carry 1 mark each. For each question, write your answer in the answer space provided.
16. Mr. Tan earns \$ 29628 every year. Express this amount to the nearest thousand dollars.

Answer: \$
17. Evaluate $(1-2 / 5) \div 6 \times 5$.

Answer: $\qquad$
18. Express 260 g as a fraction of 1 kg 20 g .

Answer: $\qquad$
19. Arrange the following in increasing order:
$5 / 8,1 / 6,0.76$

Answer: $\qquad$
20. Find the value of 0.4 / 100

Answer: $\qquad$
21. How many $\frac{1}{6}$ are there in $31 / 6$ ?

Answer: $\qquad$
22. Express 2.45 h in hours and minutes.

Answer: $\qquad$
23. A movie started at $6.25 \mathrm{p} . \mathrm{m}$. and it lasted $1^{3 / 4} \mathrm{~h}$. At what time did the musical end?

Answer: $\qquad$
24. Find the area of the shaded triangle.


Answer: $\qquad$ $\mathrm{cm}^{2}$
25. Stephanie was 6 years old on her birthday in 1998. How old will she be on her birthday in 2017?

Answer: $\qquad$ years old
26. The solid below is made up of $2-\mathrm{cm}$ cubes. Find the volume of the solid.


Answer: $\qquad$ $\mathrm{cm}^{3}$
27. What is the volume of the water in the tank?


Answer: $\qquad$ $\mathrm{cm}^{3}$
28. The volume of a cube is $343 \mathrm{~cm}^{3}$. What is the length of one side of the cube?

Answer: $\qquad$ cm
29. The figure below is not drawn to scale. It is made up of a square and an isosceles triangle. Find its perimeter.


Answer: $\qquad$ cm
30. The figure below is not drawn to scale, O is the center of the circle. $\angle C O D=120^{\circ}$. Find $\angle A B O$.


Answer: $\qquad$。
31. The pie chart below shows the student's choices in ice-cream flavors.


If $1 / 10$ of the students like Vanilla flavor ice-cream, what fraction of the students likes Chocolate flavor ice-cream?

Answer: $\qquad$。
32. In the diagram below, the dotted line is the line of symmetry. Form a symmetric figure by shading the least number of squares.

33. Express $12 \frac{1}{2}$ as a percentage

Answer: $\qquad$ \%
34. Find the average of $5.74,4.9,1.45$.

Answer: $\qquad$
35. The figure below is made up of a square and an equilateral triangle. What is the perimeter of the figure?


Answer: $\qquad$ cm

Section C: For Questions 36-50, show your working clearly in the space given and write your answers in the spaces provided. The number of marks is shown in the bracket at the end of each question or part-question.
36. Mrs. Tan wants to build a square-shaped fence to keep her rabbits. She wants a pole to be at each corner. She used a total of 32 poles on each side of the square. How many poles did she use?

Answer:
37. The figure below is not drawn to scale. $A B C D$ is a rhombus. $A B E F$ is a trapezium, $A B / / F E . \angle B E F=110^{\circ}$. Find $\angle A D C$.


Answer: $\qquad$
38. Mr. Lim had $5 / 8$ as many apples as oranges. After selling 30 apples, he had $\frac{1}{4}$ as many apples as oranges left. How many oranges did Mr. Lim have?
39. The figure below is made up of 2 semicircles where $A B$ is equal to $C D$. Find the perimeter of the shaded area. Give your answer in terms of $\pi$.


Answer:
40. (a) How many odd numbers are there from 1 to 99 ?
(b) What is the value of $2+4+6+\ldots+96+98$ ?

Answer:
(a)
(b)
41. The figure below is not drawn to scale. $A B C D$ is a rectangle. AGEF is a parallelogram. $\angle \mathrm{AGF}=135^{\circ} . \angle \mathrm{CGF}=15^{\circ}$
(a) Find $\angle \mathrm{EAG}$
(b) Find $\angle \mathrm{BCG}$


Answer:
(a)
(b)
42. The total weight of 4 boxes is 660 kg . Box A is 50 Kg less than Box B. Box C weighs $2 / 5$ of Box B. Box C weights $1 / 2$ heavy as Box $A$ What is the weight of Box D?
43. A rectangular water tank of length 20 cm , breadth 15 cm is filled completely with water. Jane uses ${ }^{4} / 9$ of the water to wash the floor and $1 / 4$ of the rest to water the plants. The depth of the water left in the tank was 1.5 cm . How much water was in the tank at first? Give your answers in liters. ( $1 \ell=1000 \mathrm{~cm}^{3}$ )

Answer:
44. The pie chart below shows how the Chan family spent their money for their vacation.

(a) If $52.5 \%$ of their expenditure was on food and transport, how much did they spend on shopping?
(b) What is the percentage of their total expenditure on the hotel room charges?
(c) Express as a ratio the amount of money spent on the hotel room charges to the amount spent on transport.
(a)
(b)

(c)
45. The figure below is not drawn to scale. $A B C$ is a right-angled triangle. $\mathrm{AC} / / \mathrm{GD} . \angle \mathrm{ACE}=50^{\circ} . \angle \mathrm{EGB}=85^{\circ} . \angle \mathrm{CDE}=65^{\circ}$.
(a) Find $\angle \mathrm{BAC}$
(b) Find $\angle$ BFC

(a)
(b)
46. The area of a square is $64 \mathrm{~cm}^{2}$. The length and breadth of a rectangle is in the ration 7:6. If the perimeter of the rectangle and the square is in the ratio of 13:4. what is the area of the rectangle?

Answer:
47. Mr. Lim spent 30 days to paint his house. He started painting on Sunday $1^{\text {st }}$ November. On a weekday, he uses $3 / 5$ as much paint as he uses on a weekend. If he used a total of 252 litres of paint or his house, how many litres of paint did he use during the weekends? (A weekend consists of Saturday and Sunday)
48. The bathtub in your new house has two taps, the "Cold" and the "Hot" tap. If the "Cold" tap alone is turned on full, the bathtub can be filled in 4 minutes, if the "Hot" tap alone is turned on full, the bathtub can be filled in 5 minutes. When the plug at the bottom of the bathtub is released, $40 \%$ of the fully-filled bathtub can be emptied in 1 minute. How long will it take for the bathtub to be filled with both taps turned on full and the plug pulled out as well?

49. In a production factory, a total of 2500 male and female workers were employed. $60 \%$ of them were female workers and the rest were male workers. During peak season, more female workers were employed to speed up production. The percentage of female workers increased to $75 \%$ of the new total number of workers. How many female workers joined the factory?
50. At 9a.m., Terry left Town A for Town B which was 560 km away. 2 hours later, David left Town A for Town B at an average speed of 40km/h faster than Terry. He overtook Terry at 3p.m. How far away was Terry from Town B when David arrived at Town B?

