

**Primary Six
Mathematics
Continual Assessment One**

Questions 1 to 5 carry one mark each.

For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write it in the space provided.

1. In the numeral 25.043, the digit _____ is in the tenths place.

- (1) 0
- (2) 2
- (3) 3
- (4) 4

2. Box A contains 3 times as many marbles as Box B. If there are 24 marbles altogether, how many marbles are there in Box A?

- (1) 6
- (2) 8
- (3) 18
- (4) 72

3. The ratio of Daisy's saving to Mabel's saving is 2:3. What fraction of Daisy's saving is Mabel's saving?

- (1) $\frac{2}{3}$
- (2) $\frac{2}{5}$
- (3) $\frac{3}{2}$
- (4) $\frac{5}{2}$

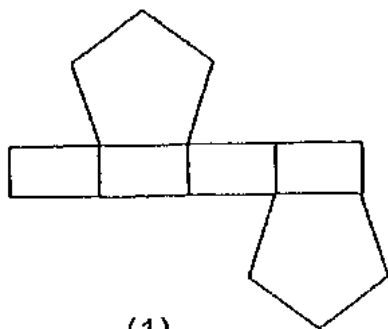
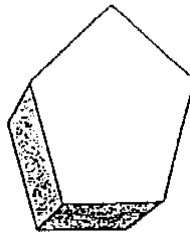
4. The number of vans is $\frac{1}{6}$ the number of cars in a car park. Express the number of cars as a ratio of the total number of cars and vans in the car park.

- (1) 1:6
- (2) 1:7
- (3) 6:7
- (4) 7:6

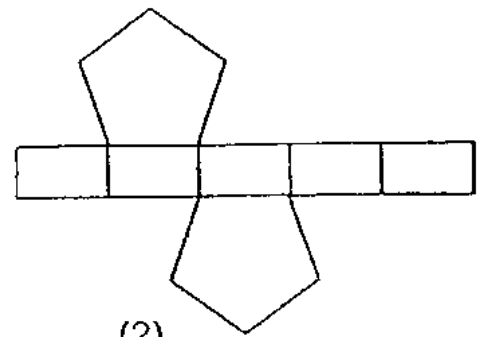
5. Find the value of $2t - 4$ if $t = 5$.

- (1) 6
- (2) 2
- (3) 3
- (4) 10

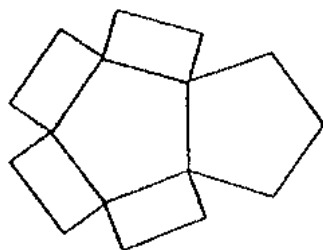
6. The figure below shows a solid. Which one of the following is a net of the solid?



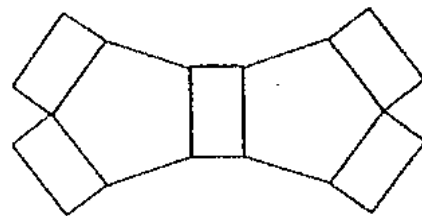
(1)



(2)



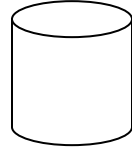
(3)



(4)

7. How many faces does the solid cylinder on the right have?

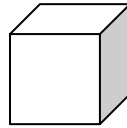
- (1) 1
- (2) 2
- (3) 3
- (4) 0



Solid Cylinder

8. How many edges does a cube have?

- (1) 12
- (2) 8
- (3) 6
- (4) 4



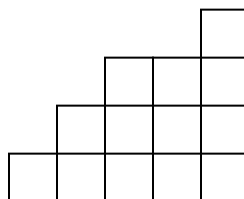
9. Mr Lim's suitcase weighed 39.4 kg after rounding off the weight to the nearest 1 decimal place.

What could be the actually weight of his suitcase?

- (1) 39.04 kg
- (2) 39.34 kg
- (3) 39.43 kg
- (4) 39.48 kg

10. The figure below is made up of small squares. Using the lines of the figure, how many squares of different sizes are there?

- (1) 13
- (2) 16
- (3) 17
- (4) 19



11. In a class test, Peter scored 36 out of 50 marks for Science. Matthew scored 9 marks more than Peter. Express the ratio of Peter's marks to Matthew's marks.

- (1) 4:1
- (2) 4:3
- (3) 4:5
- (4) 18:25

12. Stella's weight is $\frac{4}{5}$ of Nancy's weight. If Nancy is 12 kg heavier than Stella, find Stella's weight.

- (1) 12 kg
- (2) 15 kg
- (3) 48 kg
- (4) 60 kg

13. 7 pens and 3 erasers cost \$y. If each pen costs \$1, find the cost of each eraser.

- (1) $\$(y-3)/7$
- (2) $\$(y-7)/3$
- (3) $\$(y/7)-3$
- (4) $\$(y/3)-7$

14. In a class, x out of 42 pupils are girls. What fraction of the pupils are boys?

- (1) $(42-x)/42$
- (2) $x/42$
- (3) $x/(42-x)$
- (4) $(42-x)/(42+x)$

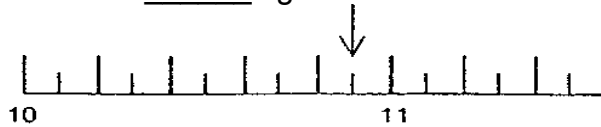
15. Lily is p years old. Her brother is 2 times as old as her. What is their total age?

- (1) 3p years
- (2) $3p^2$ years
- (3) $(2 + 2p)$ years
- (4) $(p^2 + p)$ years

Questions 16 to 35 carry 1 mark each. For each question, write your answer in the answer space provided.

16. Evaluate $40 - (2 + 4 \times 5) \div 2$

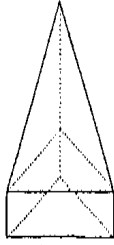
17. The figure below shows part of a bathroom scale. The reading indicated by the arrow is about _____ kg.



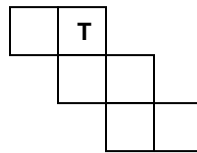
18. Chee Keong opens his storybook. The sum of the two page numbers, which face him, is 123. He turns to the next page. What is the number on the next page?

19. $70.9 \div 100 =$ _____

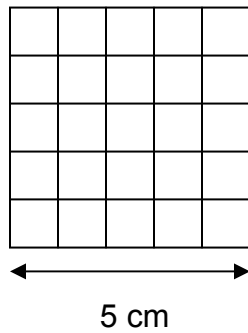
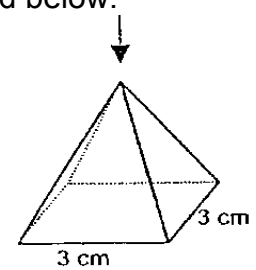
20. How many faces are there in the figure below?



21. The figure below shows a net of a cube. If T is the top of the cube, write **B** in the correct square to show the bottom of the cube.



22. The solid figure on the right is a square pyramid. Jill looks at the solid from the top. Draw the top view as Jill sees it in the square grid below.



- 23 To make jelly, Mrs Ng used 3 cups of jelly powder for every 7 cups of water. If she used 21 cups of jelly powder, how many cups of water would she have to use?

24. The number of apples in a box is $2\frac{1}{3}$ the number of oranges. What is the ratio of the number of oranges to the number of apples?

25. There are 4 blue buttons and 2 red buttons in a box. There are _____ times as many blue buttons as red buttons in the box.

26. The table shows the proportion of the amount of paint a painter used to obtain the colour green. Complete the following table.

Blue	Yellow
4 ℓ	3 ℓ
12 ℓ	9 ℓ
	21 ℓ

27. 0.06 less than 81 is _____.

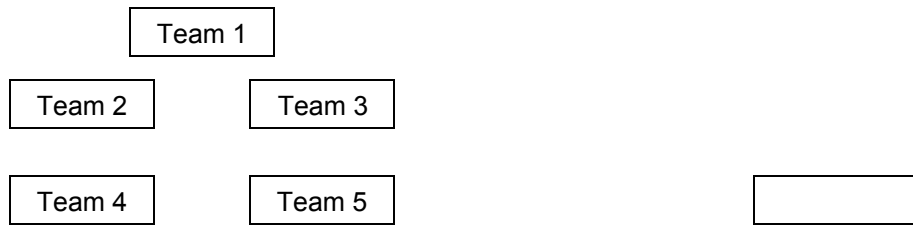
28. The average of 4 numbers was 22. When one number was removed, the new average became 21. What was the value of the number that was removed?

29. What is the missing number in the box?

$$9 : 4 : 2 = \boxed{} : 24 : 12$$

30. The ratio of the number of chickens to the number of ducks on a farm was 11:8. If 15 ducks were added to the farm, the number of ducks would be equal to the number of chickens. How many chickens were there on the farm?

31. In a street soccer tournament, 5 teams were selected to play in the finals. If each team had to play with the other 4 teams once, how many games would be played in all?



32. Simplify $2 \times 2 \times 2 + m \times m$.

33. A basket containing b kg of durians weighs 30 kg. What is the weight of the basket when it is empty?

34. The total weight of Joyce, Sahra and Angie is s kg. If the average weight of Joyce and Angie is 38 kg, express Sahra's weight in terms of s .

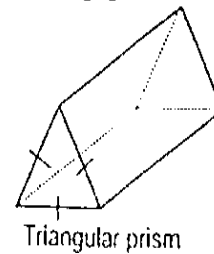
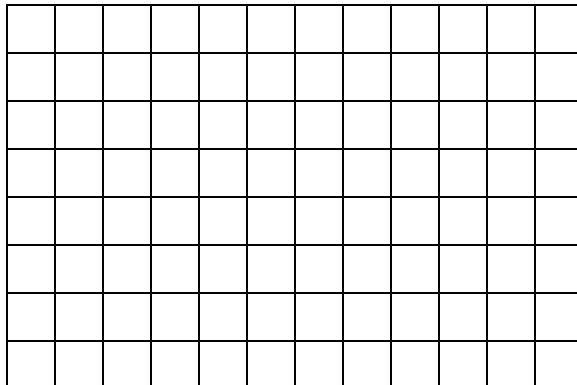
35. If $n=4$, find the value of $(3n^3)/2$.

For questions 36 to 50, show your working clearly in the space below each question and write your answers in the space provided.

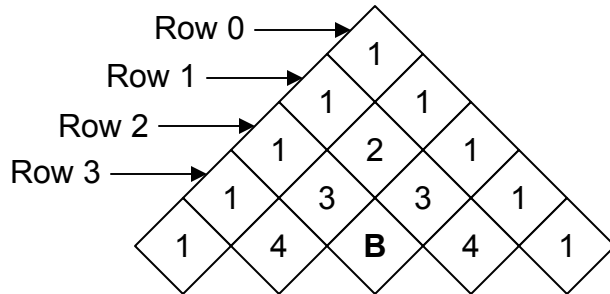
36. $\frac{2}{3}$ of a number is 6. What is $\frac{1}{2}$ of the number? [2]

37. Mr Tan is 4 times as old as his son now. If his son is y years old now, how old was Mr Tan 7 years ago? [2]

38. The figure on the right shows a prism. Complete its net below. [2]

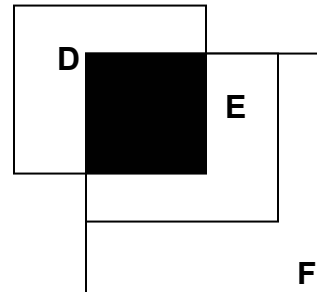


39. Study the pattern below.
- What is the number represented by B? [1]
 - The sum of the numbers in row 1 is 2. The sum of the numbers in row 2 is 4. What is the sum of the numbers in row 7? [2]



40. The ratio of the number of guppies to the number of angelfish in a pet shop is 2:3. The number of angelfish is $\frac{2}{3}$ the number of goldfish. The shop owner decided to replace $\frac{1}{4}$ of the guppies with angelfish. The number of angelfish replaced is equal to the number of guppies taken out. There were 30 more goldfish than angelfish. How many guppies were there in the pet shop at first? [3]

41. The figure below consists of 3 squares D, E and F overlapping one another. The ratio of their areas is 5:6:8 respectively. $\frac{1}{3}$ of E is shaded. What is the ratio of the shaded part to the unshaded part? [3]



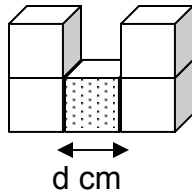
42. In a class quiz of 20 questions, 4 points were given for each correct answer and 2 points were deducted for each incorrect answer. If Joel answered all 20 questions and scored 26 points, how many correct answers did he get? [4]

43. The solid below is made up of 5 cubes, each of edge d cm.

a) What is the area of the shaded face shown in the figure? [1]

(Express your answer in terms of d .)

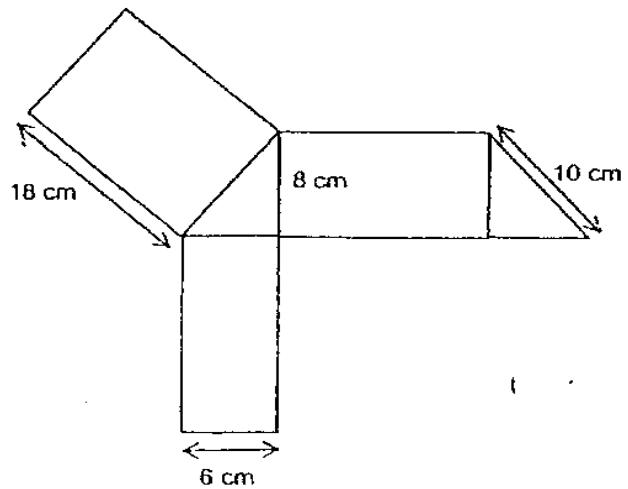
b) If $d=3$, what is the total surface area of the solid? [3]



44. The figure below shows the net of a triangular prism.

a) What is the area of one triangular face of the prism? [2]

b) What is the perimeter of the figure? [2]



45. $\frac{3}{4}$ of the seats in a concert hall were occupied. The ratio of the number of adults to the number of children present was 7:3. If 90 more adults turned up for the concert, the number of adults would be 3 times the number of children. How many seats were there in the concert hall? [4]

46. Alice, Betty and Cindy shared \$408 in the ratio of 3:4:5. How much more money would Betty receive if the ratio was 1:3:4? [4]

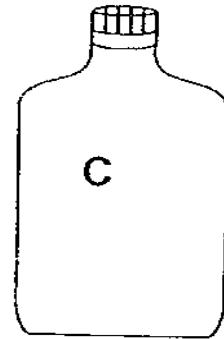
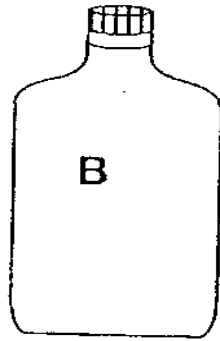
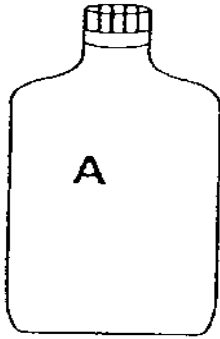
47. At 10a.m., containers A, B, C and D contained 453l of water. At 1 p.m., the water in container A had increased by 12l, the water in container B remained the same, the water in container C decreased by 38l and the water in container D was doubled. By this time, the amount of water in each of the 4 containers was the same.
- a) How much water was there in container A at 10 a.m.? [3]
- b) What was the overall increase in the amount of water for all the four containers? [2]

48. Mary and Tom had the same amount of money. Mary bought a badminton racket and had \$86 left. Tom bought a pair of roller blades and had $\frac{1}{4}$ of what Mary had left. If the roller blades cost 3 times as much as the racket, how much did Tom have at first? [5]

49. The 3 jars below contain twenty-cent and fifty-cent coins only. The number of coins in the 3 jars is the same. The ratio of number of twenty-cent coins to the number of fifty-cent coins in jars A, B and C is 1:1, 7:2 and 11:7 respectively.

a) What is the ratio of the total number of twenty-cent coins to the number of fifty-cent coins?

b) If there are \$600 in jar B, find the total number of fifty-cent coins in jar B.



50. The management of Park View Estate wants to find out how many residents there are in the estate. The ratio of the number of adults to the number of children is 8:15. The number of women is $\frac{2}{3}$ the number of boys. There are 42 more boys than men. The number of girls is the same as the number of women.

a) What is the ratio of the number of men to the number of women in the estate?

b) How many residents are there in the estate?

End of Paper