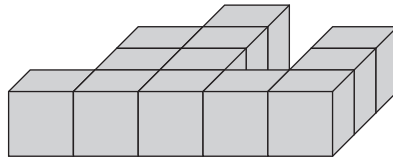


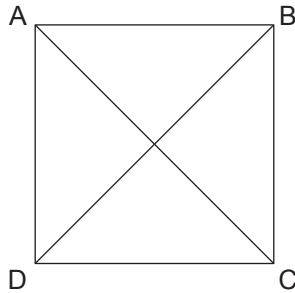
4. Find the number of unit cubes used to build the solid shown below.



- (1) 10
(2) 11
(3) 12
(4) 13 ()
5. Josie has a mass of 36 kg and Tricia has a mass of 54 kg. What is the ratio of Josie's mass to the total mass of both girls?
(1) 2 : 3
(2) 2 : 5
(3) 3 : 5
(4) 5 : 2 ()
6. $\frac{7}{9}$ of 720 km is _____.
(1) 480 km
(2) 540 km
(3) 560 km
(4) 580 km ()
7. $1255 \times 60 =$ _____.
(1) 75 000
(2) 75 300
(3) 75 500
(4) 75 600 ()
8. A rectangular tank measures 24 cm by 13 cm by 7 cm. Find the capacity of the tank.
(1) 2048 cm^3
(2) 2118 cm^3
(3) 2148 cm^3
(4) 2184 cm^3 ()
9. $8\frac{4}{5}$ of 30 has the value of _____.
(1) 246
(2) 260
(3) 264
(4) 266 ()
10. Which of the following shows nine million, ninety thousand, nine hundred and nine correctly?
(1) 9 009 090
(2) 9 090 099
(3) 9 090 909
(4) 9 900 909 ()

11. ABCD is a square of edge 12 cm. Lines AC and BD divide the square into four identical triangles. Find the area of triangle DAB.

- (1) 18 cm^2
(2) 36 cm^2
(3) 72 cm^2
(4) 144 cm^2



()

12. Express 250 cents as a ratio of \$10.

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

()

13. Express $7\frac{5}{7}$ as a decimal. Round off the answer to 2 decimal places.

- (1) 7.57
(2) 7.70
(3) 7.71
(4) 7.75

()

14. $12\frac{1}{5} - 5\frac{1}{10} = \underline{\hspace{2cm}}$

- (1) $6\frac{9}{10}$
(2) 7
(3) $7\frac{1}{10}$
(4) $17\frac{3}{10}$

()

15. At a shop, \$6384 was collected from the sale of film, which was packed in packs of two rolls. How many rolls of film were sold altogether if the price of each pack of film was \$21?

- (1) 152
(2) 304
(3) 456
(4) 608

()

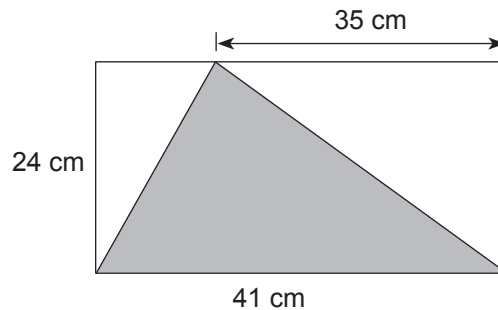
BOOKLET B (20 marks)

**Questions 16 to 25 carry 1 mark each. Questions 26 to 30 carry 2 marks each.
Write your answers on the lines provided.**

16. Write 4 554 045 in words.

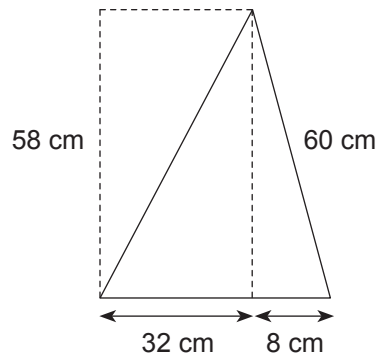
17. $6\ 000\ 000 + 30\ 000 + 9000 + 60 + 3 =$ _____

18. Find the area of the shaded part. _____



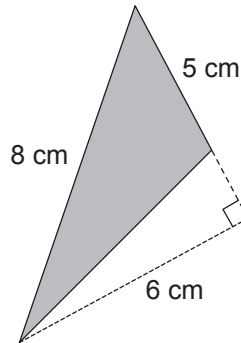
19. There are 42 students in a class. If 8 students fail a test, what is the ratio of the number of students who fail the test to the number of students who pass the test? _____

20. Find the area of the triangle. _____



21. Max baked 12 trays of cakes. There were 12 cakes on each tray. He sold each cake for \$10. How much money would he collect if he managed to sell off all cakes? _____

22. Find the area of the shaded triangle. _____



23. Find the value of $4\frac{6}{8} \times 12$. _____

24. Write three million, five hundred and nine thousand in numerals. _____

25. Jasmine mixes 3750 ml of rose syrup with 8750 ml of water. The mixture can fill 10 identical bottles completely. What is the capacity of each bottle? Express your answer in litres. _____

26. If $18 : 30 : 72 = 6 : \square : 24$, what is the missing number in the box? _____

27. A rectangular tank, 45 cm long, 24 cm wide and 30 cm high, is filled with water to the brim. Maggie takes $\frac{1}{5}$ of the water from the tank. How much water is taken from the tank? Express your answer in litres. ($1 \text{ l} = 1000 \text{ cm}^3$) _____
28. Mrs Brown bought 3 kg of sugar. She used $\frac{3}{4}$ of it. How many grams of sugar had she left? _____
29. Derrick is 8 years old. He is 32 years younger than his father. Express the ratio of Derrick's age to his father's age. _____
30. Find the value of $80 \times (69 + 22) - 288$. _____

 **PAPER 2 (10 + 50 = 60 marks) The use of calculators is allowed.**

SHORT-ANSWER (10 marks)

Questions 31 to 35 carry 2 marks each. Write your answers on the lines provided.

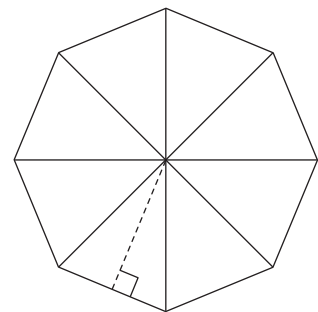
31. Evaluate $75 \times 3 + 108 \div (27 \div 3)$. _____
32. Multiply 6789 by 500. _____
33. Evaluate $\frac{36}{5} + \frac{29}{9}$. _____
34. Divide 4 976 000 by 8000. _____
35. Janet has a piece of ribbon 1254 cm long. She uses $\frac{5}{6}$ of it to decorate a box. How much ribbon does she use? _____

STRUCTURED / LONG-ANSWER (50 marks)

For questions 36 to 48, show your working clearly and write your answers in the space provided. The marks are shown in the brackets.

36. 3 similar plates and 4 similar cups cost \$35.50 while 3 such plates and 3 such cups cost \$31.50. What is the cost of 9 such plates? [3]

37. The figure below shows an octagon which is made up of 8 identical triangles. Find the area of the octagon if each triangle has a base of 5 cm and a height of 8 cm. [3]



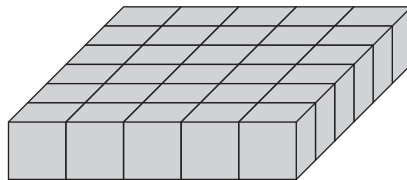
38. The total mass of 3 baskets of vegetables is $21\frac{3}{5}$ kg. Basket A has a mass of $6\frac{1}{4}$ kg and Basket B has a mass of $2\frac{7}{8}$ kg more than Basket A. What is the difference between the mass of the heaviest and the lightest baskets of vegetables? **[3]**
39. The sides of two squares are in the ratio 7 : 9. The perimeter of the smaller square is 112 cm. What is the difference in the area of the two squares? **[3]**
40. A tour package to Japan is $2\frac{1}{2}$ times as much as a tour package to Indonesia. The tour package to Japan is $\frac{5}{7}$ times as much as a tour package to England. If the cost of the Indonesian tour package is \$880, find the total cost of all the three tour packages. **[4]**

41. Angie bought an equal number of forks and spoons for a party. The forks were sold at 3 for \$2 while the spoons were sold at 4 for \$3. She spent \$5 more on spoons than on forks. How much did she spend altogether? [4]
42. Last year, $\frac{1}{4}$ of the members in a health club were women. When 56 women joined the club, the fraction of women in the health club became $\frac{5}{6}$. How many men were there in the health club? [4]
43. There were 648 more blue pens than red pens in a stationery shop. After $\frac{1}{6}$ of the blue pens and $\frac{3}{4}$ of the red pens were sold, there were 1338 more blue pens than red pens left. How many blue pens were there at first? [4]

44. Andrew, Bertha and Chloe collected money for their class fund. The average amount collected by Andrew and Bertha was \$108. The average amount collected by Andrew and Chloe was \$142. Given that the ratio of the amount of money collected by Chloe to the amount of money collected by Bertha was 3 : 1, find the total amount of money collected for the class fund. [4]
45. Cathy had five times as many trading cards as Patrick. Cathy gave $\frac{1}{4}$ of her trading cards to Patrick. Patrick then gave $\frac{1}{3}$ of his trading cards to Cathy. If Cathy had 96 more trading cards than Patrick in the end, how many trading cards did she have at first? [4]
46. Daphne's present age is $\frac{1}{5}$ her grandmother's present age. Five years ago, her grandmother was 60 years old.
- (a) Express Daphne's age five years ago as a ratio of her grandmother's age five years ago. [2]
- (b) In how many years' time will Daphne's age be $\frac{2}{5}$ her grandmother's present age? [2]

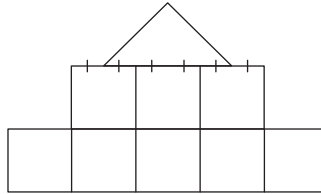
47. A container has a square base of 121 cm^2 and a height of 8 cm . It is $\frac{1}{4}$ filled with water. The water is then poured into cups of 22 ml . How many such cups are needed to contain the volume of water in the container? [2]

48. The solid below is made up of 1-cm cubes.



- What will be its height if the volume of the solid is 30 cm^3 ? [2]

49. The figure below shows a triangle and 8 identical squares. The height of the triangle is 4 cm less than its base and the squares have a total area of 1568 cm^2 .



- (a) Find the height of the triangle. [3]

- (b) Find the ratio of the area of 1 square to the area of the triangle to the area of the figure in its simplest form. [3]