



RED SWASTIKA SCHOOL

# RED SWASTIKA SCHOOL

## 2006 MID-YEAR EXAMINATION

### MATHEMATICS

Name : \_\_\_\_\_ (     )

Class : Primary 5 / \_\_\_\_\_

Date : 9 May 2006

### BOOKLET A

15 Questions

20 Marks

Duration of Paper : 2 hours 15 minutes

Note:

1. Do not open this Booklet until you are told to do so.
2. Questions 1 - 15 are to be done on the OAS provided.
3. Read carefully the instructions given at the beginning of each part of the Booklet.
4. Do not waste time. If a question is difficult for you, go on to the next one.
5. Check your answers thoroughly and make sure you attempt every question.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

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1. How many hundreds make a million?

- (1) 10
- (2) 100
- (3) 1000
- (4) 10 000

2. If the numbers 1, 2, 4, and 5 are arranged to form the smallest 4-digit number, which digit will be in the hundreds place?

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

3. What is the remainder when 1570 is divided by 20?

- (1) 5
- (2) 10
- (3) 15
- (4) 20

4. Mr Brown bought 125 mats. He decided to sell them at 5 for \$12. How much would he receive if he sold all his mats?

- (1) \$25
- (2) \$300
- (3) \$625
- (4) \$1500

5. Find the value of  $2\frac{3}{5} - 1\frac{1}{4}$ .

(1)  $\frac{7}{20}$

(2)  $\frac{2}{5}$

(3)  $1\frac{7}{20}$

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

6. How many quarters are there in  $4\frac{1}{4}$  ?

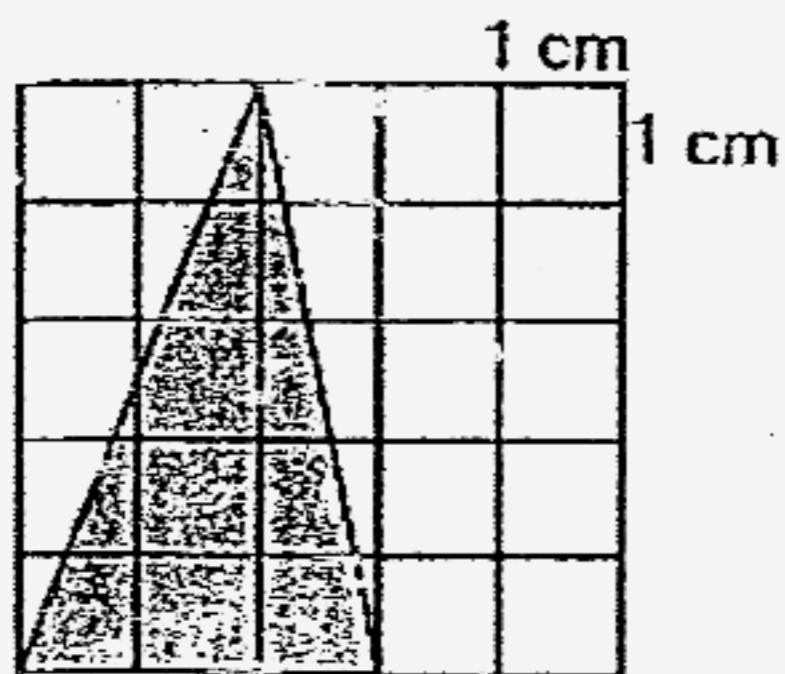
(1) 9

(2) 15

(3) 16

(4) 17

7. Find the area of the shaded triangle below.



(1)  $7.5 \text{ cm}^2$

(2)  $15 \text{ cm}^2$

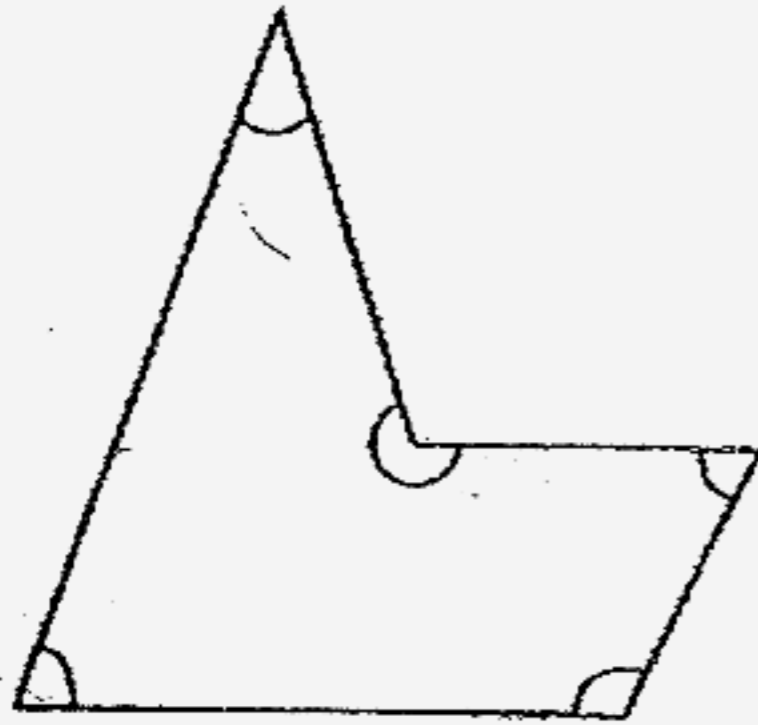
(3)  $22.5 \text{ cm}^2$

(4)  $30 \text{ cm}^2$

8. The mass of a cat is  $2\frac{1}{3}$  times the mass of its kitten. Find the ratio of the mass of the cat to the mass of the kitten.

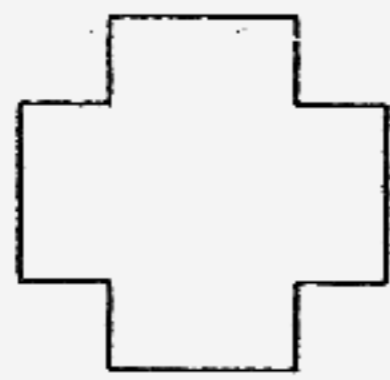
- (1) 1 : 3
- (2) 2 : 3
- (3) 3 : 7
- (4) 7 : 3

9. In the figure below, which is not drawn to scale, how many marked angles are more than a right angle?



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

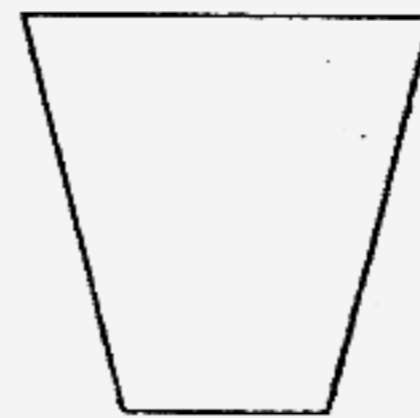
10. Which figure(s) below has perpendicular lines?



A



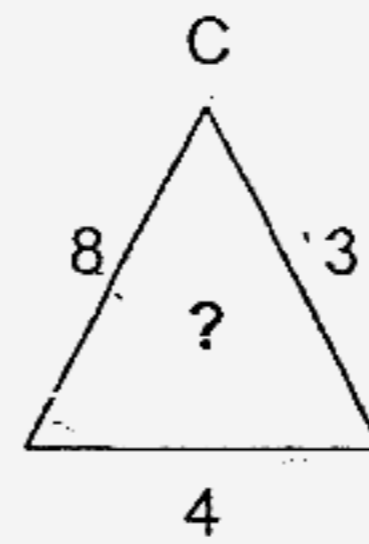
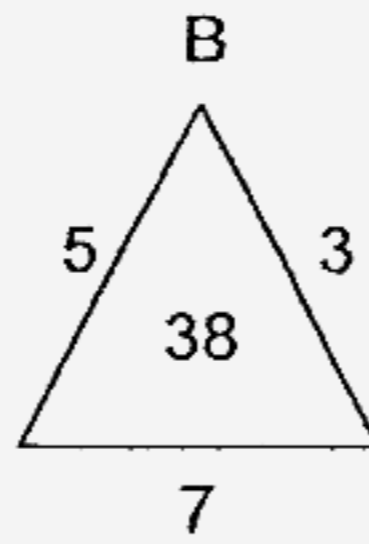
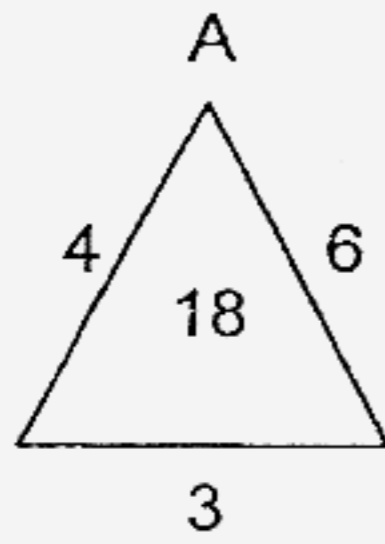
B



C

- (1) A only
- (2) A and B only
- (3) A and C only
- (4) A, B and C

11. Find the missing number in triangle C below.



- (1) 9
- (2) 15
- (3) 28
- (4) 35

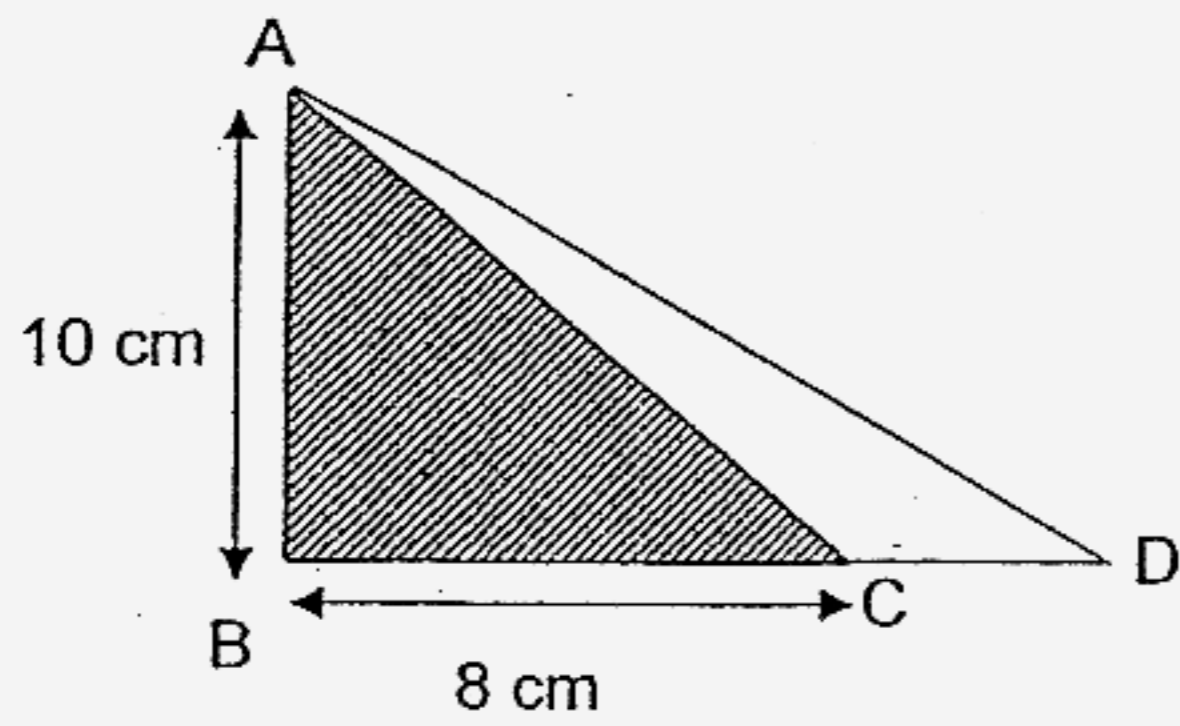
12. Mr Ho's height is 180 cm. His eldest son is  $\frac{1}{2}$  of his height and his youngest daughter is  $\frac{3}{5}$  of his eldest son's height. What is his youngest daughter's height?

- (1) 54 cm
- (2) 60 cm
- (3) 90 cm
- (4) 94 cm

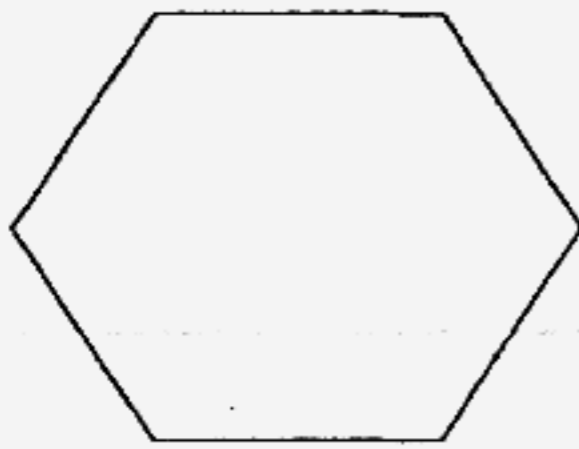
13. The ratio of the number of competitors to the number of non-competitors at a swimming carnival was 2 : 5. If there was a total of 250 non-competitors, how many more non-competitors than competitors were at the swimming carnival?

- (1) 100
- (2) 150
- (3) 350
- (4) 500

14. In the figure shown below, the ratio of the shaded part ABC to the area of the unshaded part ACD is 4 : 3. Find the area of the whole triangle ABD.



- (1)  $10 \text{ cm}^2$   
(2)  $30 \text{ cm}^2$   
(3)  $40 \text{ cm}^2$   
(4)  $70 \text{ cm}^2$
15. How many pairs of parallel lines are there in the figure below?



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



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## 2006 MID-YEAR EXAMINATION

### MATHEMATICS

Name : \_\_\_\_\_ (     )

Class : Primary 5 / \_\_\_\_\_

Date : 9 May 2006

### BOOKLET B

33 Questions

80 Marks

#### MARKS

	OBTAINED	POSSIBLE
BOOKLET A		20
BOOKLET B		80
TOTAL		100

Parent's Signature : \_\_\_\_\_

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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16. Find the value of  $25 + 15 \times (55 - 25) \div 2$ .

Ans : \_\_\_\_\_

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17. What is the missing number in the box?

$$49 \times 100 = 50 \times 100 - \square$$

Ans : \_\_\_\_\_

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18. Express 95 cm as a fraction of 1 m.  
(Give your answer in its simplest form.)

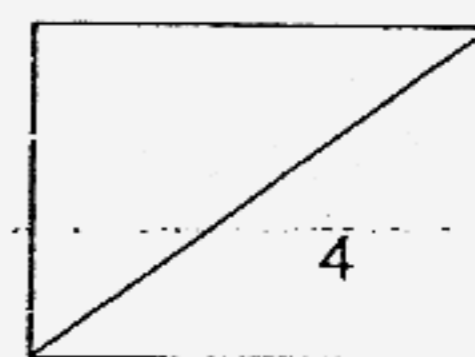
Ans : \_\_\_\_\_

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19. Jonathan spent  $\frac{1}{2}$  of his amount of money on a plate of chicken rice and  $\frac{4}{5}$  of the remaining amount of money on a plate of ice-kachang. What fraction of his money was left?

Ans : \_\_\_\_\_

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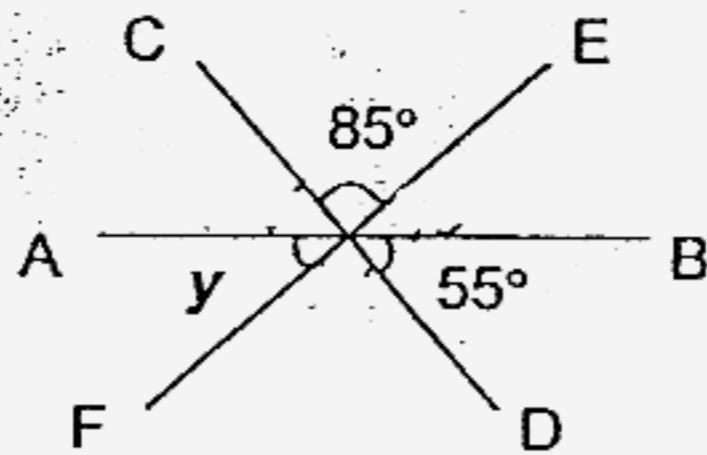




20. Elise has 4 times as many cards as Freddy. If Freddy has 2 times as many cards as Gillian, what is the ratio of the number of cards Elise has to the number of cards Gillian has?

Ans : \_\_\_\_\_

21. In the figure below, AB, CD and EF are straight lines. Find  $\angle y$ .

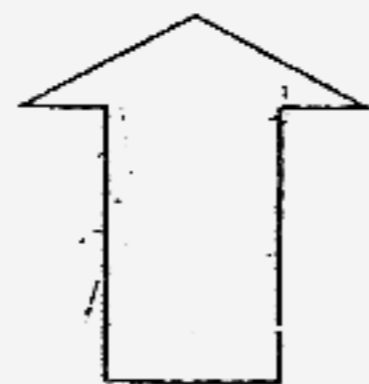


Ans : \_\_\_\_\_°

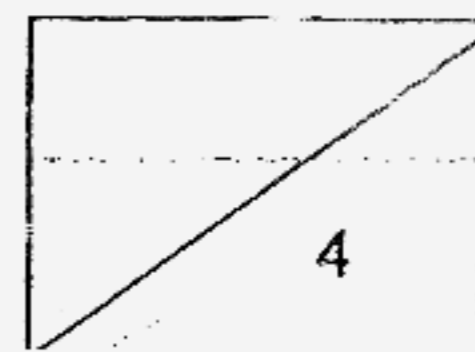
22. How many 2-cm cubes can be placed inside a cuboid measuring 20 cm by 6 cm by 9 cm?

Ans : \_\_\_\_\_ cubes

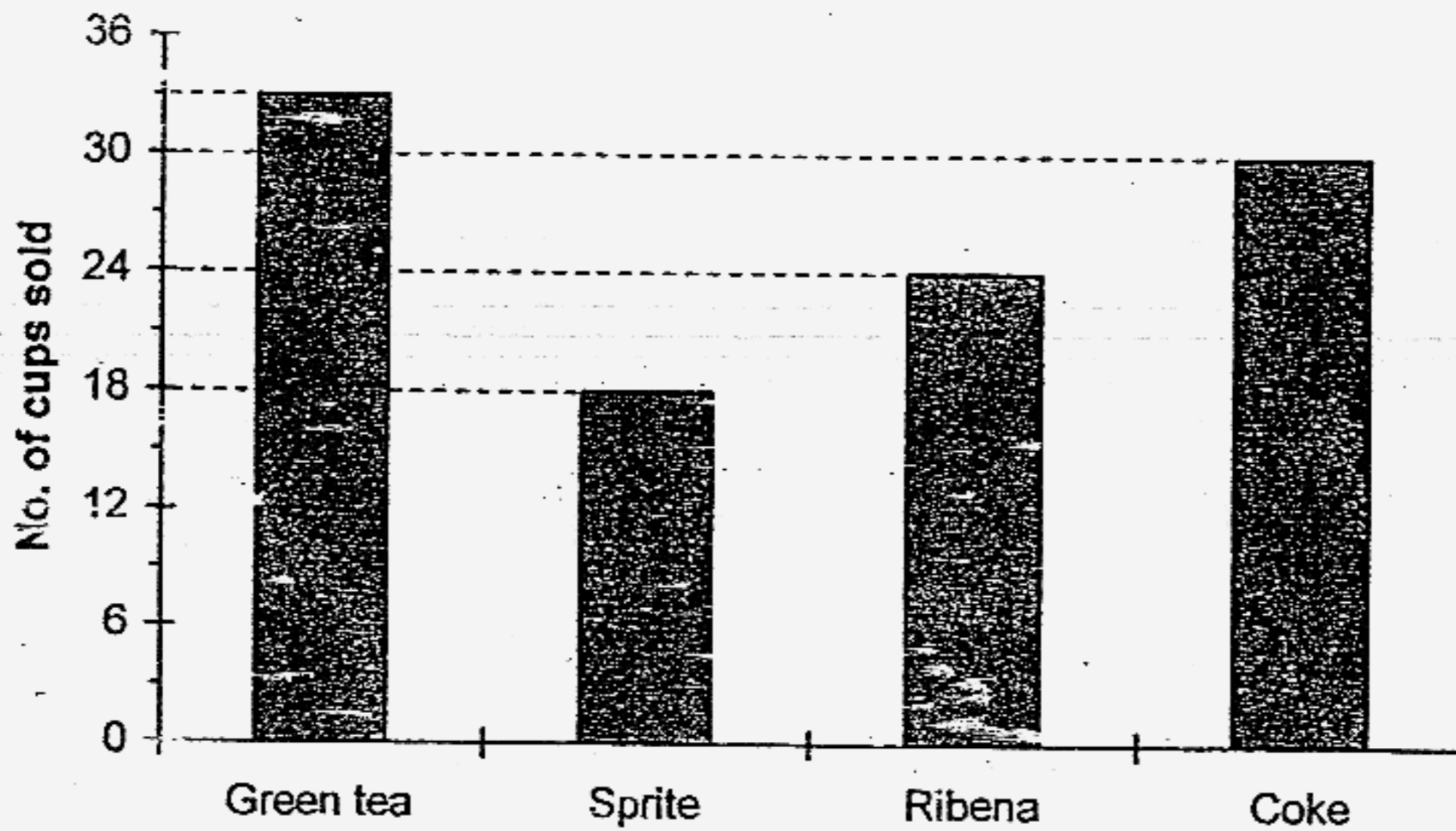
23. How many lines of symmetry does the figure below have?



Ans : \_\_\_\_\_ line(s)



The graph below shows the types of drinks sold by Mei Ling during the school's fun-fair. Study the graph below carefully and use it to answer questions 24 and 25.

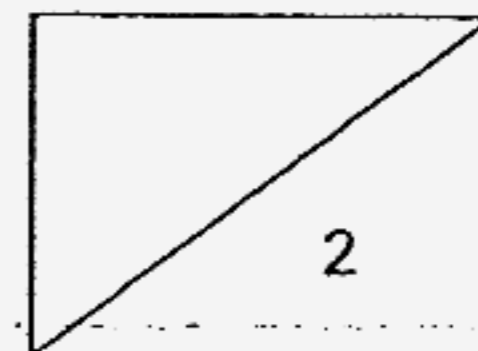


24. If each cup of drink was sold for 50 cents, how much did Mei Ling collect in all?

Ans : \$ \_\_\_\_\_

25. What is the ratio of the sales of Ribena to the total sales of Coke and Sprite? Express your answer in its simplest form.

Ans : \_\_\_\_\_



Questions 26 to 35 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(20 marks)

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26. When a number is divided by 35, the remainder is 21. If it is divided by 7, what will the remainder be?

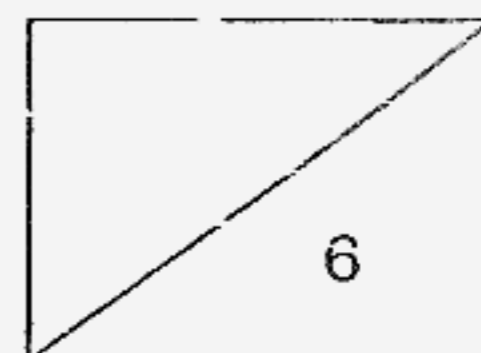
Ans : \_\_\_\_\_

- 
27. Haslinda goes to the market every 3 days. Siti goes to the market every 4 days. If the last time they went to the market together was on 5 February, on which earliest date would they go to the market together again?

Ans : \_\_\_\_\_


- 
28. A turkey cost twice as much as a duck. Jessica paid \$156 for 2 turkeys and 2 ducks. How much did each turkey cost?

Ans : \$ \_\_\_\_\_



29. The symbol  represents a number.

$$\text{If } \frac{2}{3} - \text{sun} - \text{sun} = \frac{4}{9},$$

what is the value of  ?

Ans : \_\_\_\_\_

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30. Henry and Kent shared 81 stamps in the ratio 4 : 5. If Henry gave 3 stamps to Kent, find the new ratio of Henry's stamps to Kent's stamps.

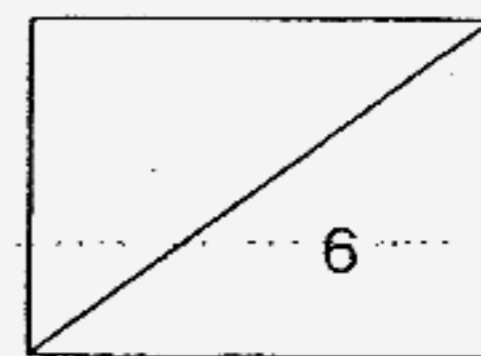
Ans : \_\_\_\_\_

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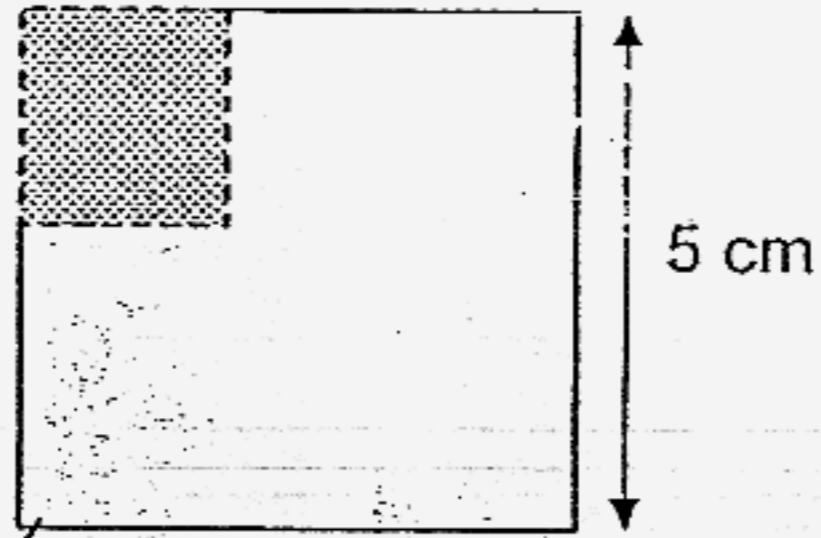
31. The perimeter of a rectangle is 36 cm and the length is  $\frac{1}{3}$  of the perimeter. What is the area of the rectangle?

Ans : \_\_\_\_\_ cm<sup>2</sup>

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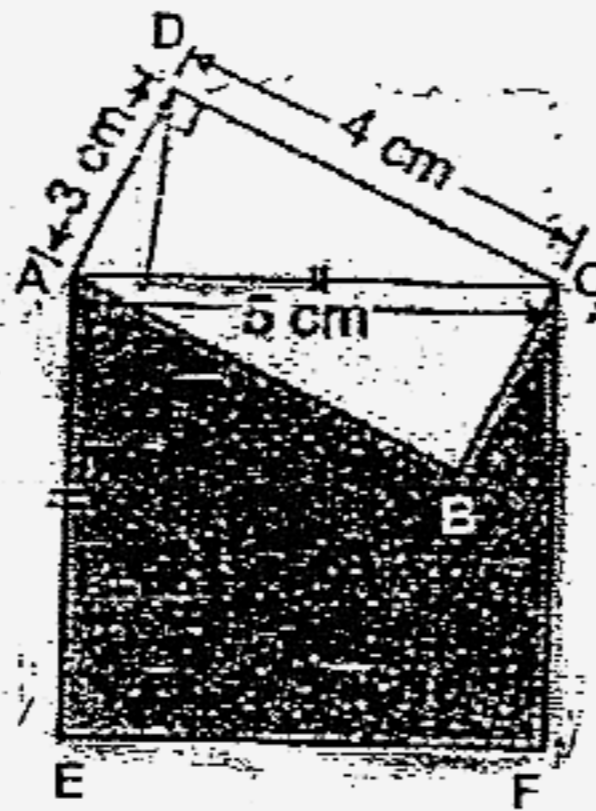


32. The figure below is not drawn to scale. A small 3-cm square is cut from a bigger square of side 5 cm. Find the ratio of the area of the remaining part of the bigger square to the area of the small square.



Ans : \_\_\_\_\_

The figure below is made up of a rectangle ABCD and a square ACFE. Study it carefully and use it to answer questions 33 and 34.

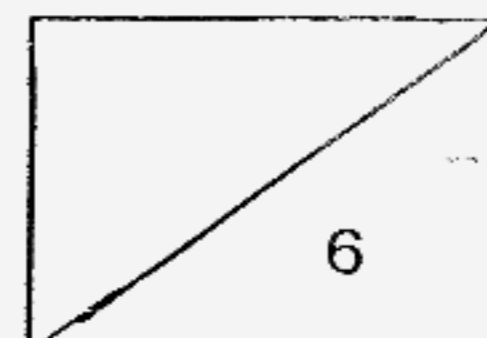


33. If  $AC = 5$  cm,  $AD = 3$  cm and  $DC = 4$  cm, find the area of triangle ABC.

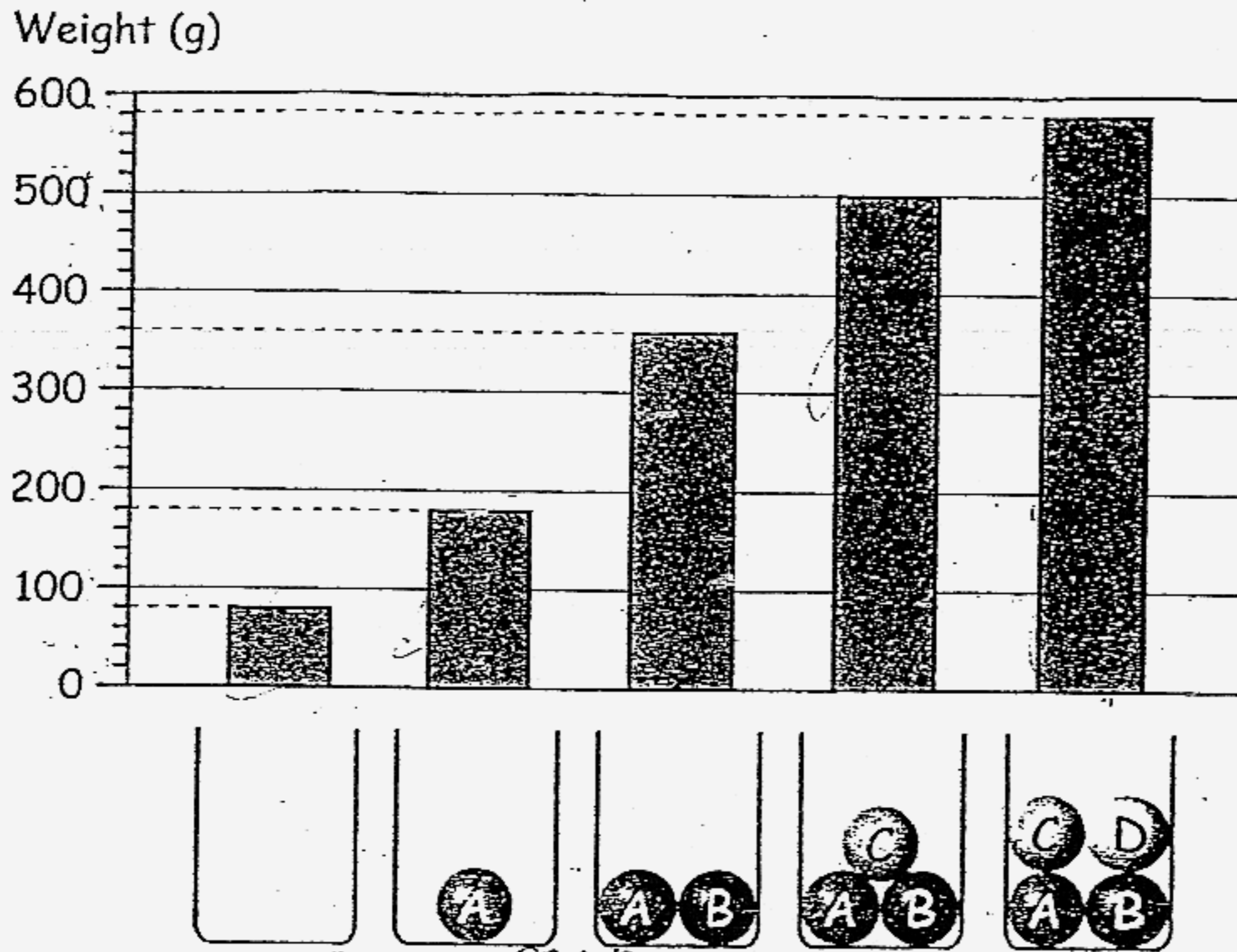
Ans : \_\_\_\_\_  $\text{cm}^2$

34. Find the area of the shaded part.

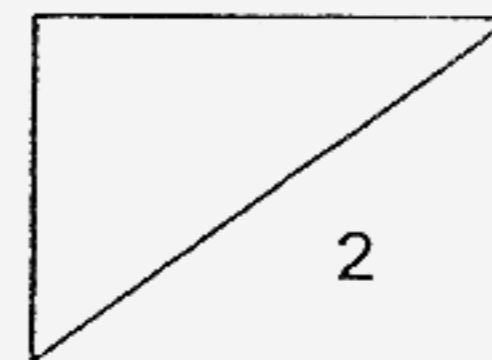
Ans : \_\_\_\_\_  $\text{cm}^2$



35. Four balls A, B, C and D are placed inside a container. The bar graph shows the mass of the container when it is empty and when different balls are placed in it. Which ball is the lightest, A, B, C or D?



Ans : Ball \_\_\_\_\_



For Questions 36 to 48, show your working clearly in the space below each question 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. (50 marks)

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36. A cat ate 32 fish in 4 days. If it ate 2 more fish each day than it did the day before, how many fish did it eat on the fourth day?

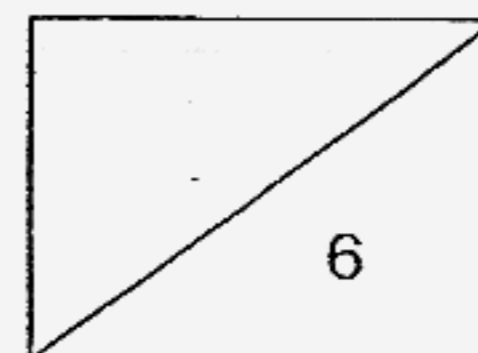
Ans : \_\_\_\_\_ [3]

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37. When working on a division sum, Kenny divided a given number by 32 instead of 23. His answer was 276. If it is divided by 23, what should the correct answer be?

Ans : \_\_\_\_\_ [3]

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38. Jane wanted to buy 8 bookshelves but she was short of \$131. She bought 4 bookshelves instead and had \$5 left. How much money did she have at first?

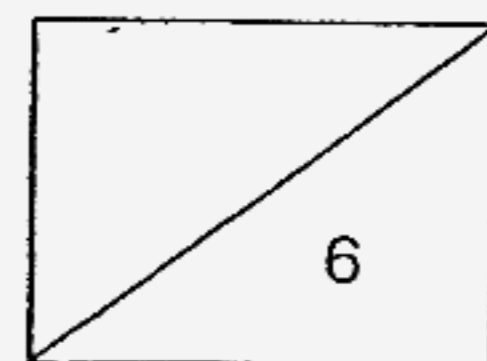
Ans : \_\_\_\_\_ [3]

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39. After Chee Seng had given some stamps to his elder brother, he had  $\frac{3}{5}$  of them left. He then gave  $\frac{5}{9}$  of the remaining stamps to his younger sister and had 40 stamps left. How many stamps did he give to his elder brother?

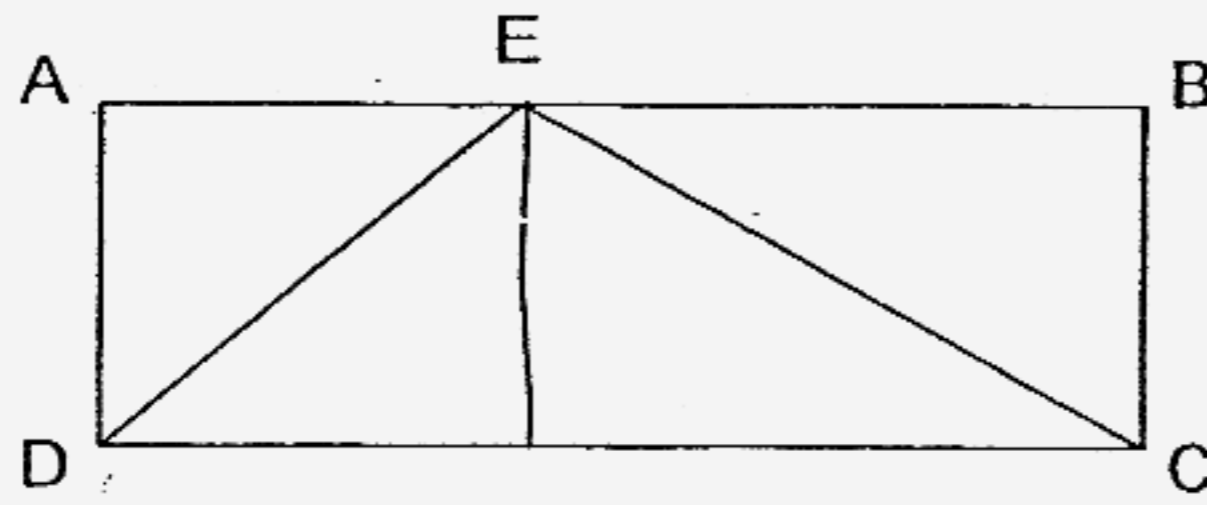
Ans : \_\_\_\_\_ [3]

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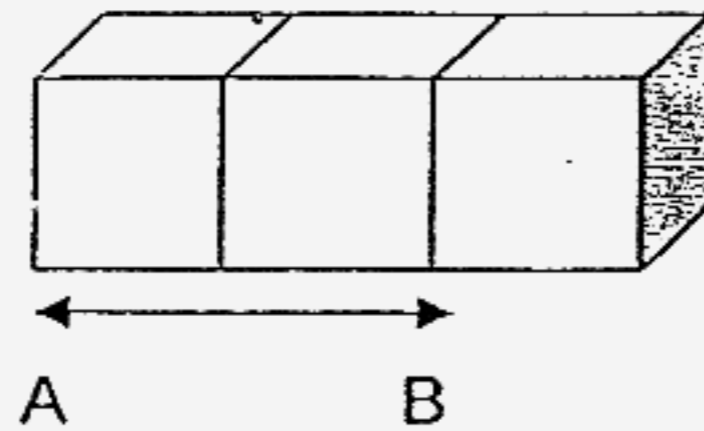
40. In the figure below, the area of the rectangle ABCD is  $100 \text{ cm}^2$ . Find the area of the triangle CED.



Ans : \_\_\_\_\_ [3]

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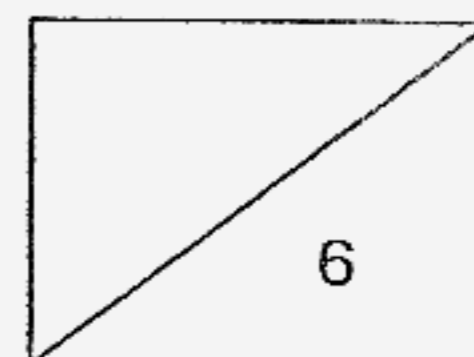
41. The figure below consists of 3 similar cubes with a total volume of  $192 \text{ cm}^3$ . What is the length of AB?



Ans : \_\_\_\_\_ [3]

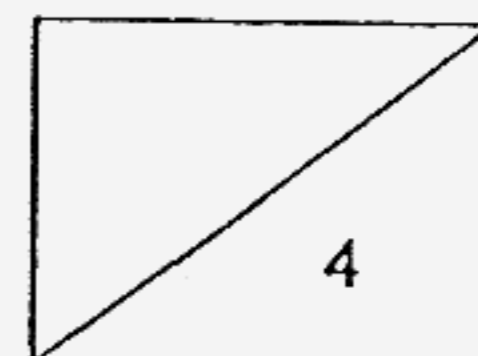
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15



42. There are 115 people at a book fair.  $\frac{3}{5}$  of them are adults and the rest are children. If there are 10 more girls than boys, how many boys are there?

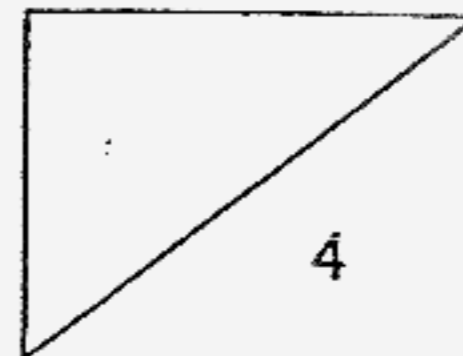
Ans : \_\_\_\_\_ [4]



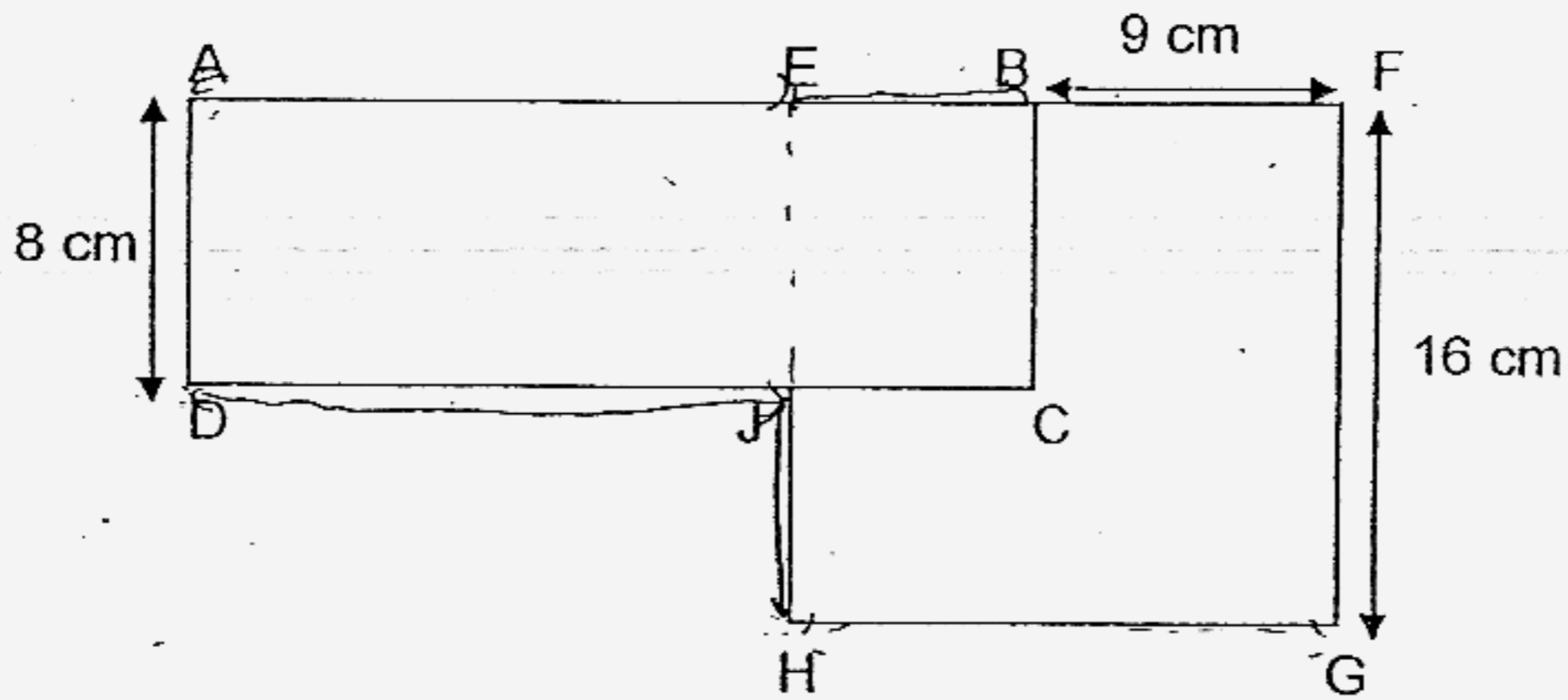
43. Donna saves \$1 every day. For every dollar that she saves, Karen saves \$3 more. Karen has saved \$60 more than Donna.
- (a) How many days have they been saving?
- (b) What is the total amount saved by the two girls?

Ans : (a) \_\_\_\_\_ [2]

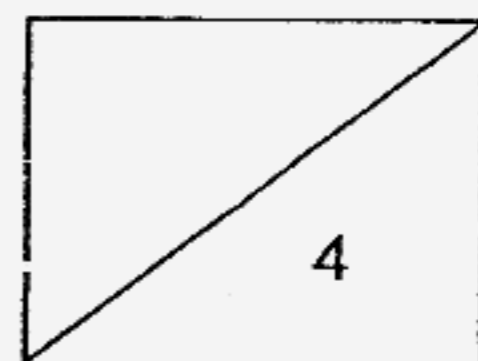
(b) \_\_\_\_\_ [2]



44. In the figure below, a rectangle ABCD is placed on top of a square EFGH. If the square and the rectangle have the same area, what is the perimeter of the whole figure?

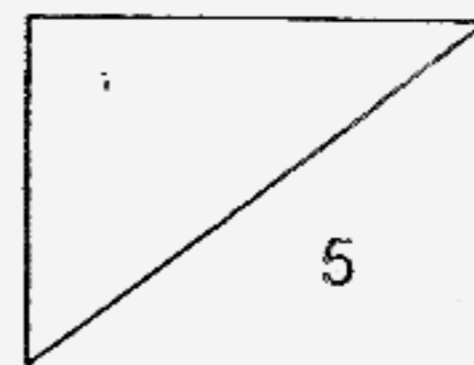


Ans : \_\_\_\_\_ [4]



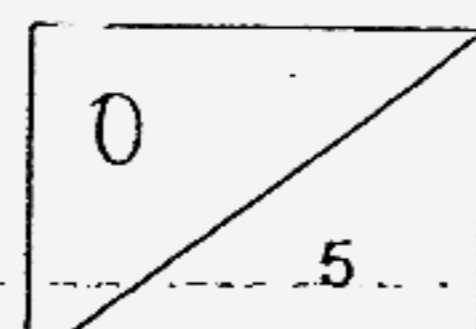
45. A certain number of passengers boarded a bus in Town A. When the bus reached Town B,  $\frac{1}{2}$  of the passengers alighted and 10 new passengers boarded. At Town C,  $\frac{1}{5}$  of the passengers alighted from the bus and another 8 new ones boarded. There are now 40 passengers on the bus. How many passengers were there on the bus at first?

Ans : \_\_\_\_\_ [5]



46. There are some lorries, motorcycles and cars at 3 car parks.  $\frac{2}{5}$  of the total number of vehicles in the 3 car parks are motorcycles and  $\frac{1}{4}$  of the remainder are lorries. There are 54 more cars than lorries. If each car park has an equal number of cars, how many cars are there in each car park?

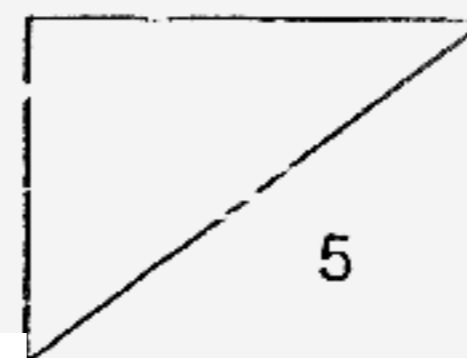
Ans : \_\_\_\_\_ [5]



47. At a camp, the ratio of the number of boy scouts to the number of girl guides was 5 : 4. However, when 8 boy scouts left the camp for another activity, the ratio of the number of boy scouts to the number of girl guides left in the camp became 11 : 12. How many children were at the camp at first?

Ans : \_\_\_\_\_ [5]

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48. Madam Saleha had an equal number of quail eggs and duck eggs. At the end of the day, 14 quail eggs and 140 duck eggs were sold. Now, the ratio of the number of quail eggs to the number of duck eggs is 3 : 1.

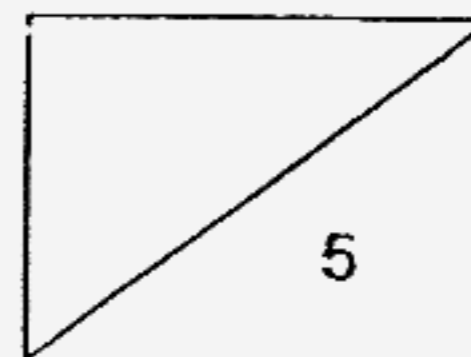
- (a) How many quail eggs are there left now?  
(b) How many duck eggs were there at first?

Ans : (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]

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END OF PAPER





1. 4  
 2. 2  
 3. 2  
 4. 2  
 5. 3  
 6. 4  
 7. 1  
 8. 4  
 9. 2  
 10. 2  
 11. 4  
 12. 1  
 13. 2  
 14. 4  
 15. 3  
 16. 250  
 17. 100  
 18. 19/20  
 19. 1/10  
 20. 8:1  
 21. 40  
 22. 120 cubes  
 23. 1 lines  
 24. \$52.50  
 25. 1:2  
 26. 0  
 27. 17  
 28. 52  
 29. 1/9  
 30.  $81 \div 9 = 9$   
 $9 \times 5 = 45$   
 $45 + 3 = 48$  (kent)  
 $9 \times 4 = 36$   
 $36 - 3 = 33$  (Herny)  
 $48 - 33 = 16:11$
- 31)  $36 \div 3 = 12$  (length)  
 $12 \times 2 = 24$   
 $36 - 24 = 12$   
 $12 \div 2 = 6$  (breadth)  
 $12 \times 6 = 72$
- 32)  $3 \times 3 = 9$   
 $5 \times 5 = 25$   
 $25 \div 9 = 16$   
 $= 16:9$
- 33) 6cm<sup>2</sup>  
 34) 19cm<sup>2</sup>  
 35) D
- 36)  $2 \times 6 = 12$   
 $32 - 12 = 20$   
 $20 \div 4 = 5$   
 $5 + 6 = 11$   
 It eat 11 fish
- 37)  $\square \div 32 = 276$   
 $\square = 276 \times 32 = 8832$   
 $8832 \div 23 = 384$   
 The correct answer should be 384.
- 38) 141  
 39) 60  
 40) 50cm<sup>2</sup>  
 41) 8cm  
 42) 18  
 43) 100  
 44) 114cm  
 45) 60  
 46) 27 cars
- 47) 54 children  
 48) a) 189  
 b) 203