NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2006
MATHEMATICS
PRIMARY 5

BOOKLET A

15 Questions

20 marks

Total Time for Booklet A & B: 2h 15min

INSTRUCTIONS TO CANDIDATES

DO NOT OPEN THE BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS

Section	Maximum Marks	Actual Marks
A	20	
B + C	80	
Total	100	

Name: _____ ( )

Class: Pr 5 _____

Date: 30 October 2006

Parent's Signature. _____ _____

Section A (20 marks)

Questions 1 to 10 carry one 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) and then shade the correct oval on the OAS.

1. How many hundreds are there in 5 300?

   (1) 530

   (2) 53

   (3) 3

   (4) 30

2. How many $\frac{1}{7}$ are there in 21?

   (1) 147

   (2) 63

   (3) 3

   (4) 14

3. The length of the whiteboard in the classroom is about _____ .

   (1) 0.35 cm

   (2) 3.5 cm

   (3) 35 cm

   (4) 350 cm

4. $\frac{2}{5} \div 4$ is the same as _____ .

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

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

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

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

5. The sides of a triangle are in the ratio 3 : 4 : 5.
What fraction of the perimeter is the length of the **longest side**?

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

(2) $\frac{3}{5}$

(3) $\frac{5}{7}$

(4) $\frac{5}{12}$

6. Pears are only sold at 3 for $2.
Raju has $9. The **maximum** number of pears he can buy is _____ .

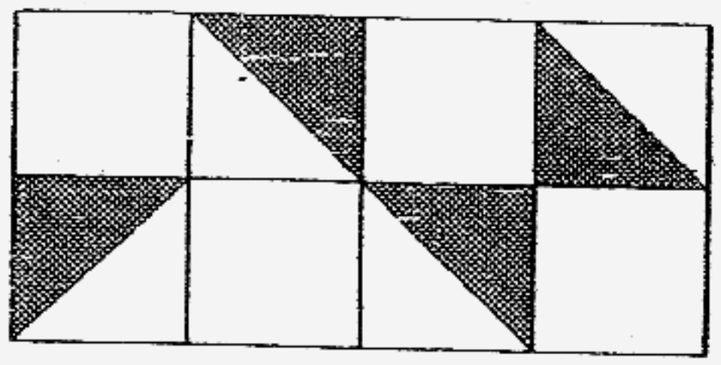
(1) 6

(2) 9

(3) 12

(4) 13

7. What percentage of the figure below is shaded?



(1) 75 %

(2) 40 %

(3) 25 %

(4) 4 %

8. 30 % of 2 kg 200 g is _____ g.

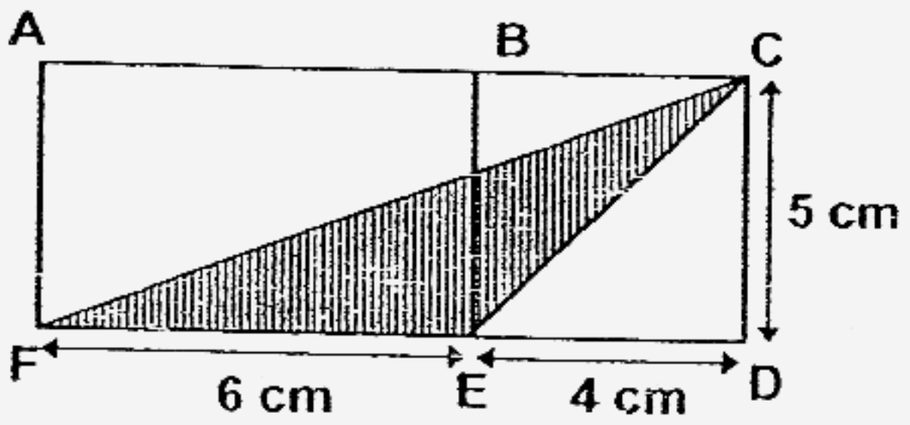
(1) 6.6

(2) 66

(3) 660

(4) 6 600

9. What is the area of the shaded triangle CEF?



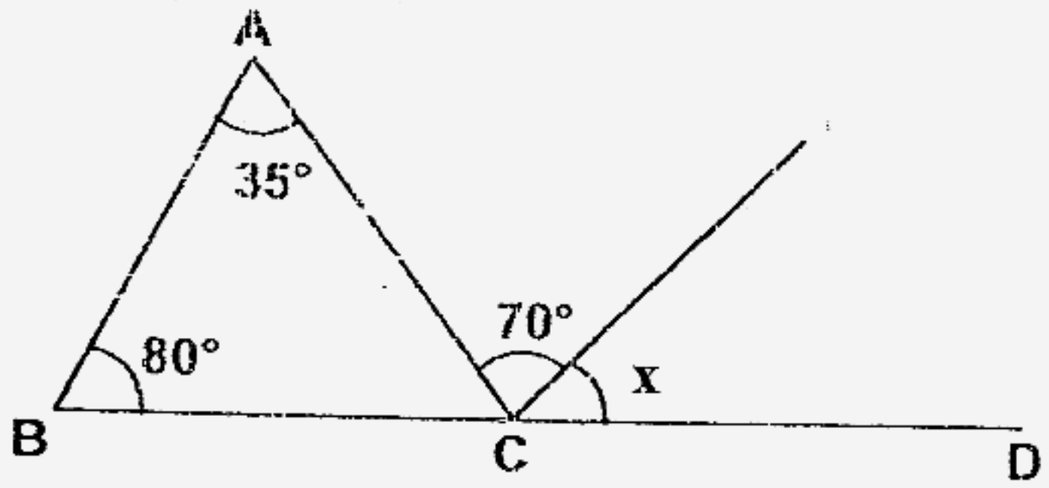
(1) 30 cm^2

(2) 25 cm^2

(3) 15 cm^2

(4) 12 cm^2

10. In the diagram below, not drawn to scale, BD is a straight line.
ABC is a triangle. What is the angle marked 'x' ?



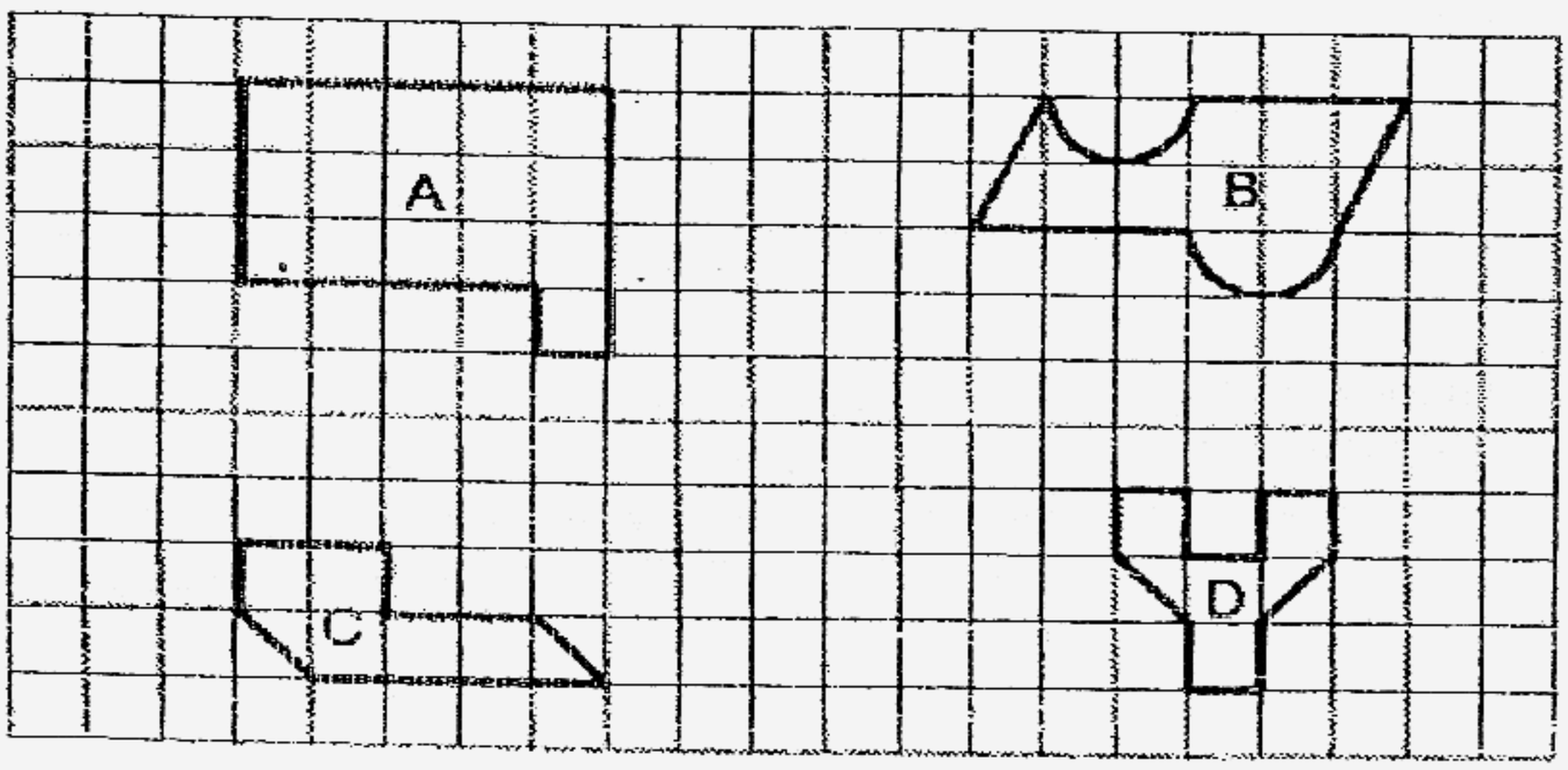
(1) 35°

(2) 45°

(3) 80°

(4) 115°

11. Which of the following shapes can tessellate?



(1) A and B only

(2) B and C only

(3) A, B and C only

(4) A, B, C and D

12. A box of Pokemon cards was shared equally among a group of 10 children.
2 of them gave all their Pokemon cards to the rest of the children.
As a result, the rest of the children received 4 more Pokemon cards each.
How many Pokemon cards were there in the box **at first**?

(1) 80

(2) 160

(3) 180

(4) 320

13. The total mass of an orange and a lemon is 250g.
The total mass of the lemon and a peach is 180g.
The peach is $\frac{3}{5}$ as heavy as the orange.
What is the mass of the lemon?

(1) 42 g

(2) 70 g

(3) 75 g

(4) 85 g

14. There were 6 girls and 4 boys in a group.
The total marks obtained by the 6 girls for Mathematics is 420.
The average mark obtained by the 4 boys for Mathematics is 82.
What is the average mark obtained by the group for Mathematics?

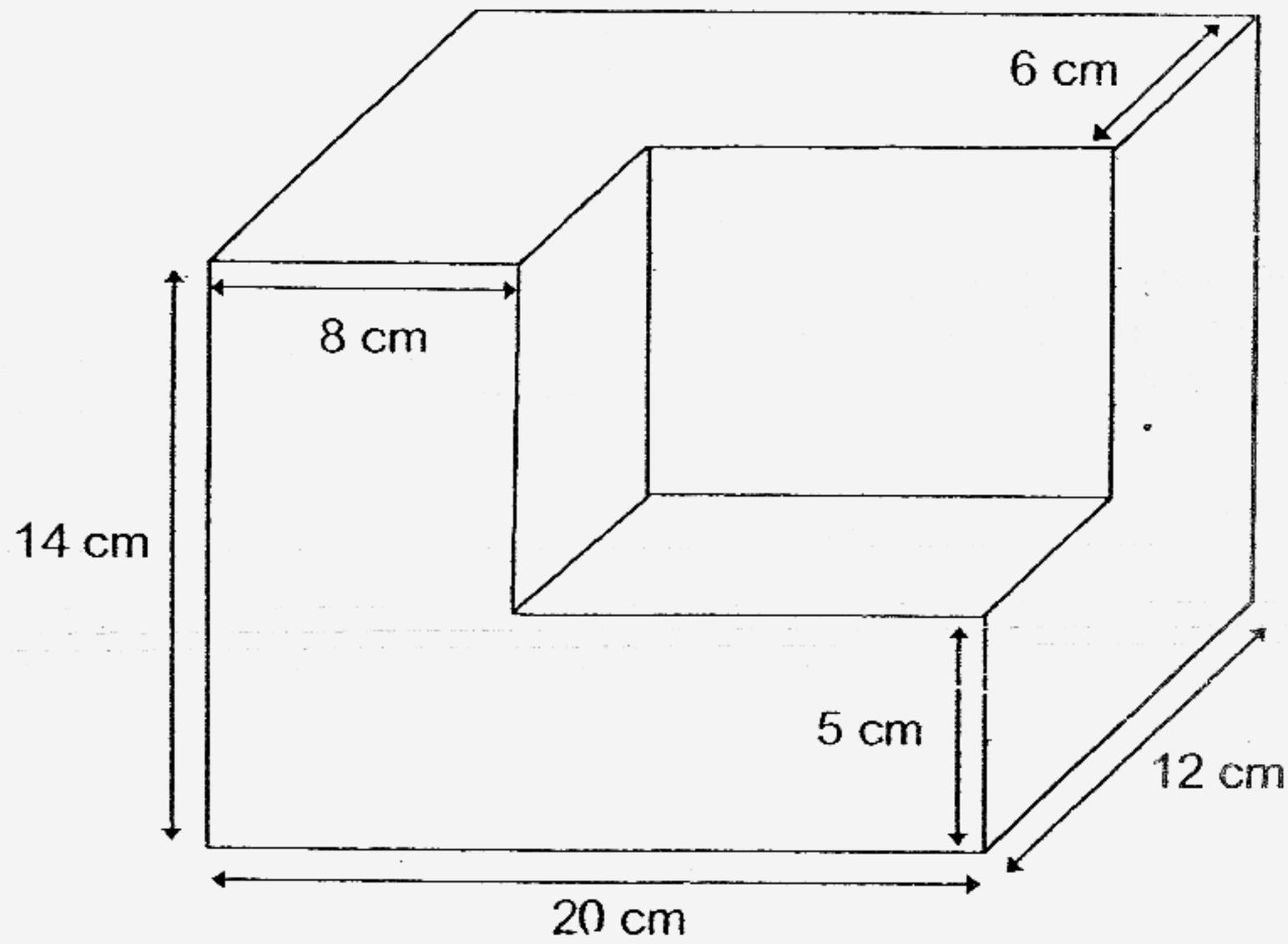
(1) 76

(2) 75.8

(3) 74.8

(4) 70

15.



Some **3-cm cubes** were cut off from a cuboid 20 cm by 12 cm by 14 cm to obtain the solid shown above. How many such cubes were cut off?
(The figure is not drawn to scale.)

(1) 24

(2) 72

(3) 96

(4) 124

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BOOKLET B

Name : _____ ( ) Class: Primary 5 _

SECTION B (10 marks)
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. .

16. Find the value of $30 + 14 - (42 \div 6)$.

Ans : _____

17. The ratio of Sally's mass to Gary's mass is 3 : 4.
What is Sally's mass if Gary is 12 kg heavier?

Ans : _____ kg

18. Write down the fraction which is exactly between $\frac{2}{5}$ and $\frac{3}{5}$.
Express your answer in its lowest terms.

Ans : _____

19. Mary saves 40 ¢ of her pocket money daily.
How long will she take to save $2 ?

Ans : _____ _____ days

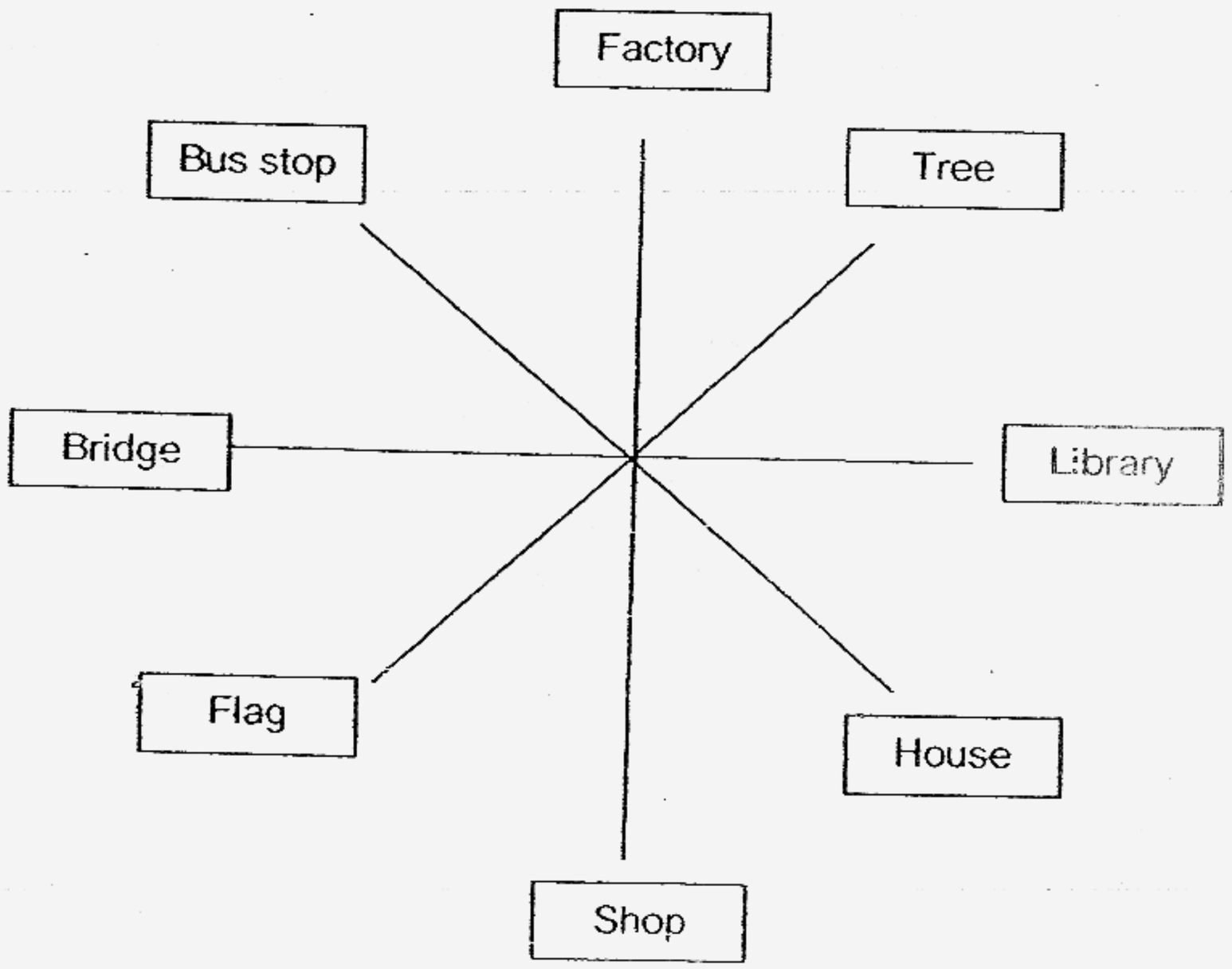
20. I have fewer than 40 beads. What is the **maximum** number of beads that I can have if I can arrange them in groups of either threes or fours equally.

Ans : _____ beads

21. Express $4\frac{2}{5}$ m in centimetres.

Ans : _____ cm

22. Jane is facing the tree. What will Jane be facing if she turns 135° clockwise?



Ans : _____

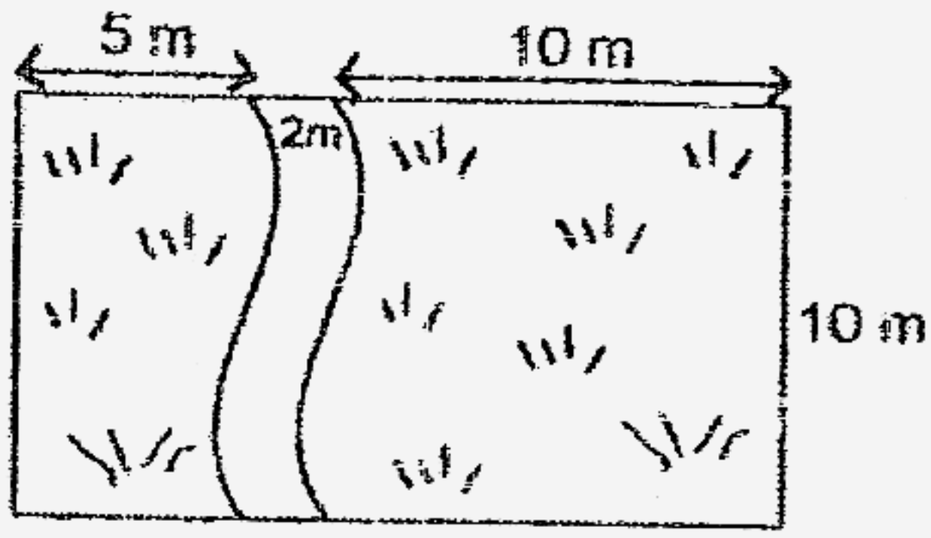
23. The table below shows the result of a survey on the number of visits made by some Primary 5 pupils to the school library last month.

Number of Visits	6	8	10	11	12
Number of Pupils	8	14	7	8	5

How many pupils visited the library **more than 10 times** ?

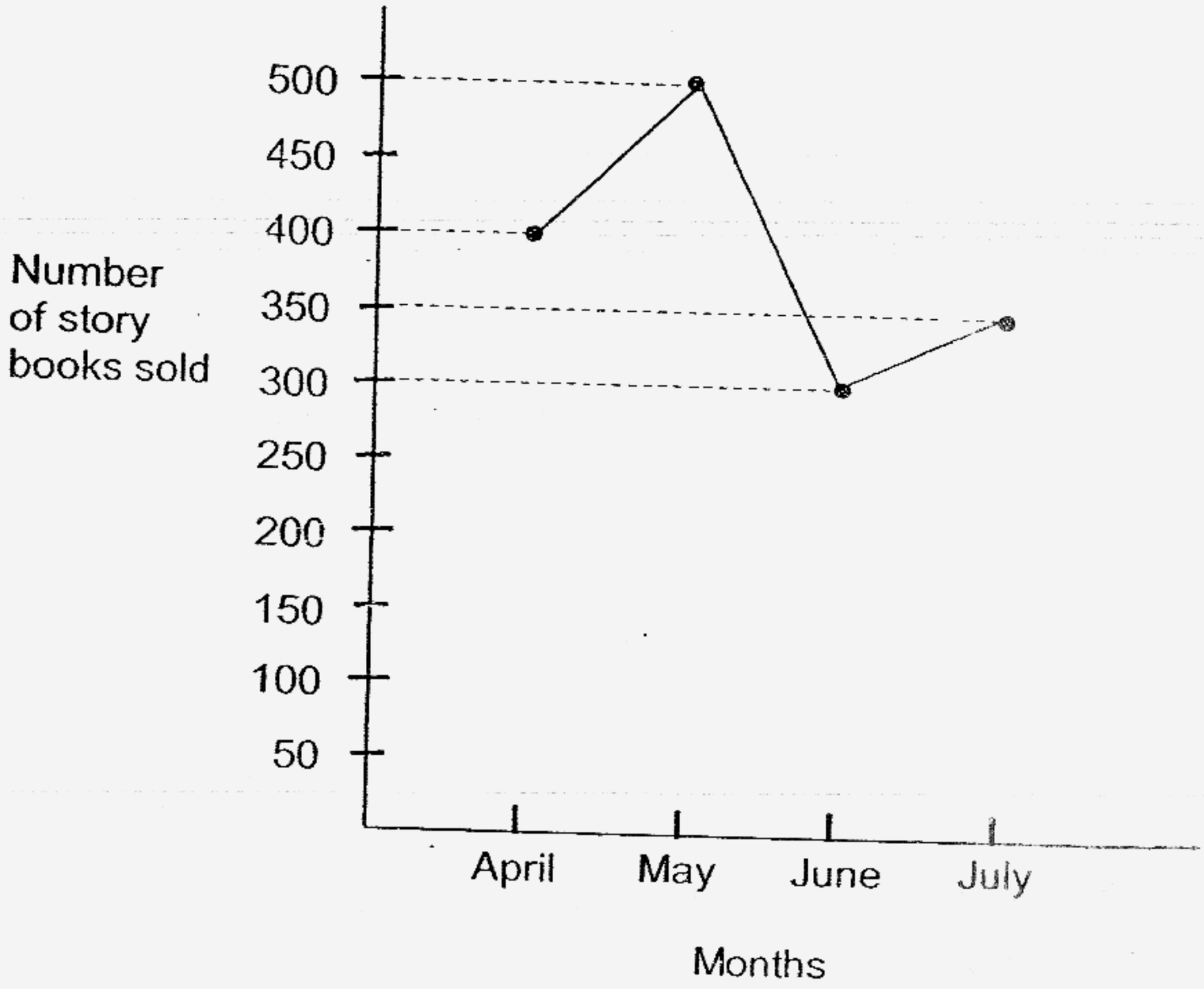
Ans : _____ pupils

24. The figure below shows a cement path across a rectangular field.
The path is 2 metres wide. Find the area of the field that is covered by the path.
(The figure is not drawn to scale.)



Ans : _____ m^2

25. The line graph shows the number of story books sold by a book shop over 4 months. What was the **increase** in the number of story books sold from June to July?



Ans : _____ story books

SECTION B (20 marks)

Questions 26 to 35 carry 2 marks each.
Show your workings 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.

26. There are 8 ducks and cats altogether. The total number of legs is 22.
How many ducks are there?

Ans : _____ ducks

27. Find the volume of a cuboid which measures 15cm by 10cm by 5 cm.

Ans : _____ cm^3

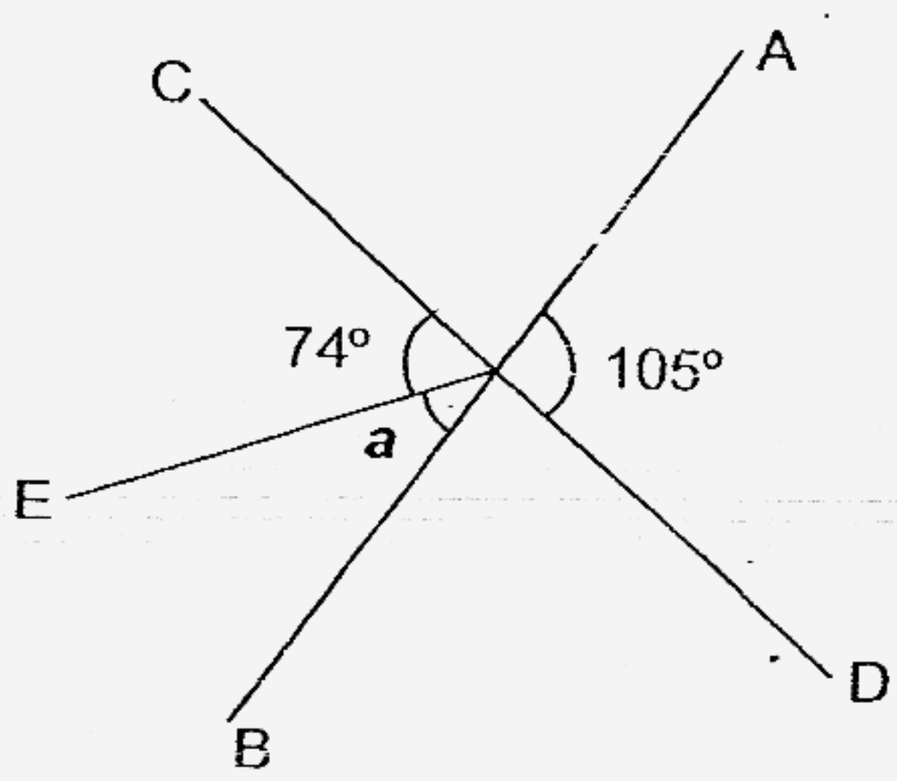
28. When $\frac{2}{3}$ of a certain number is reduced by 6, the result is 12.
What is the number?

Ans : _____

29. 7 out of 28 apples are rotten. What percentage of the apples is **not** rotten?

Ans : _____ %

30. In the figure, not drawn to scale, AB and CD are straight lines.
Find the value of $\angle a$.



Ans : _____ °

31. The total cost of 1 pen and 4 pencils is $3.60.
If each pen costs 5 times as much as a pencil, how much does 1 pen cost?

Ans : $ _____

32. In a supermarket, apples are sold at 6 for $1.70. If a customer buys 18 such apples, how much change will she get if she gives the cashier $10?

Ans : $ _____

33. A is $\frac{1}{3}$ of B and C is $\frac{5}{6}$ of B.

Express C as a ratio of A in its lowest terms.

Ans : _____ : _____

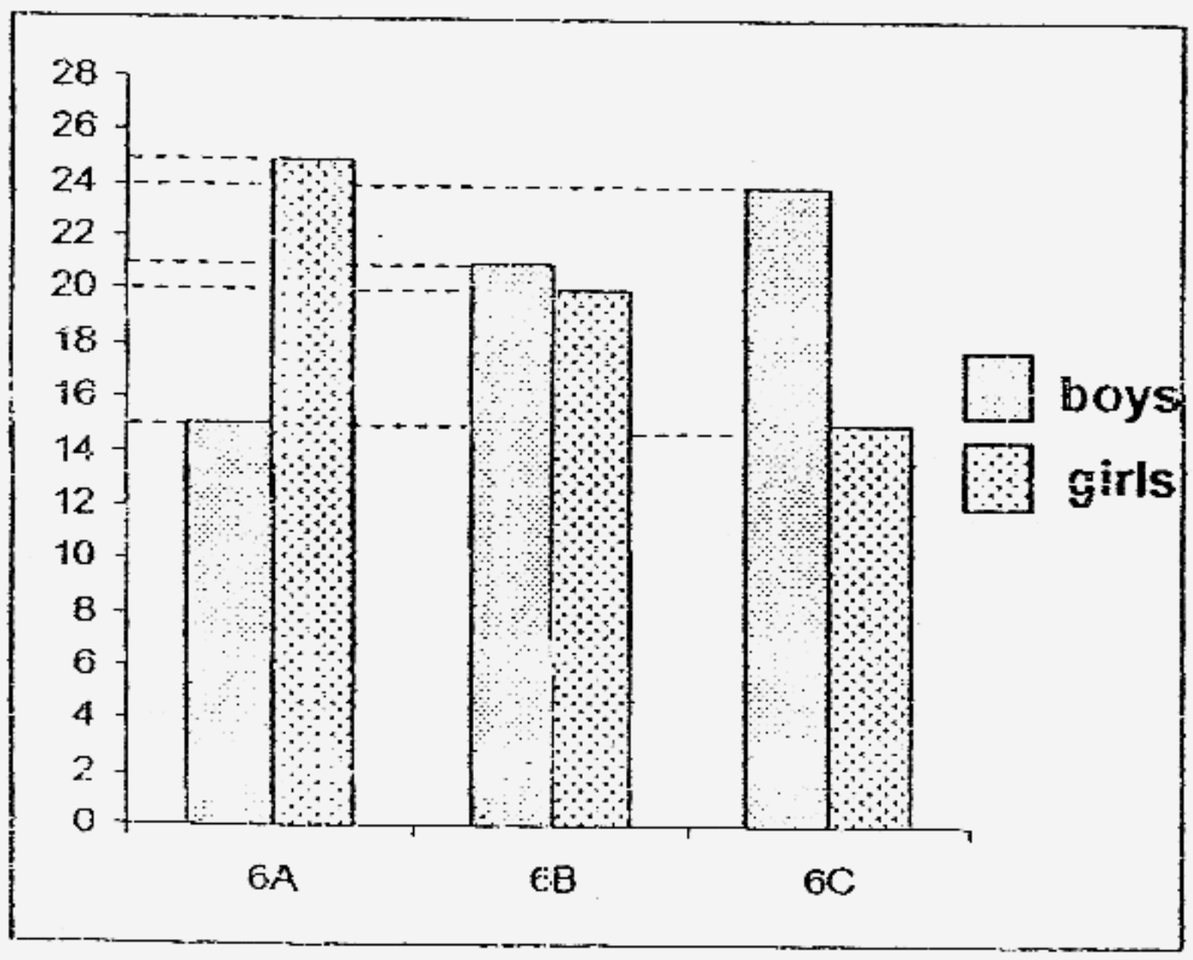
34. The table below shows the parking charges at a car park.

1st hour (7am – 5pm)	$2.00
Subsequent 1 hour or part thereof	$0.90
5pm to 7am	$2.50 per entry

How much did Mr Asha pay if he parked his car from 2 pm to 4.45 pm at this car park?

Ans : $ _____

35. The graph below shows the number of Primary 6 students in three classes.
What percentage of the total number of students is boys?



Ans : _____ %

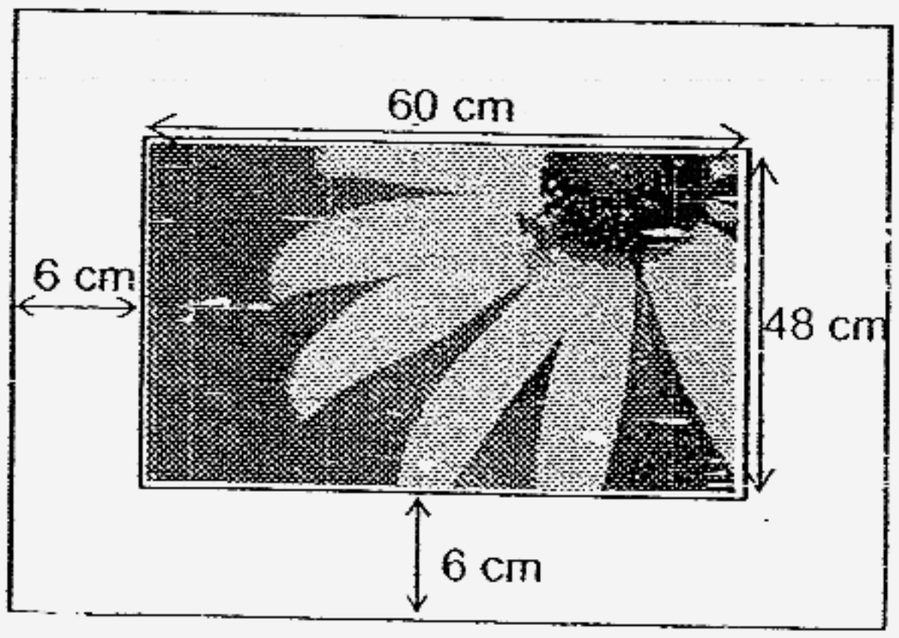
Section C (50 marks)

For questions 36 to 48, show your workings clearly in the space provided for each question and write your answers in the spaces provided.
The number of marks available is shown in the brackets at the end of each question or part-question.

36. A student spent $\frac{1}{5}$ of her pocket money on food, $\frac{1}{10}$ of it on drinks and $\frac{1}{7}$ of the remainder on stationery. If she had $6 left, what was her pocket money?

Ans : _____ (3m)

37. A picture 60 cm by 48 cm is framed up with a border of 6 cm all around it. Find the area of the border.



Frame

Ans : _____ (3m)

38. At a sale, T-shirts were sold at $20 for 3 and each pair of shorts was sold at $7.50. How much would I have to pay if I bought **6 T-shirts** and **3 pairs of shorts**?

Ans : _____(3m)

39. A sum of money was divided among John, Ken and Lionel in the ratio 3 : 8 : 4. If Lionel had $60, what was the **total amount** of money that Ken had to give to the other 2 boys so that the money was equally divided among the 3 boys?

Ans : _____(3m)

40. Melissa has $120. Norman has $\frac{4}{5}$ of Melissa's amount.

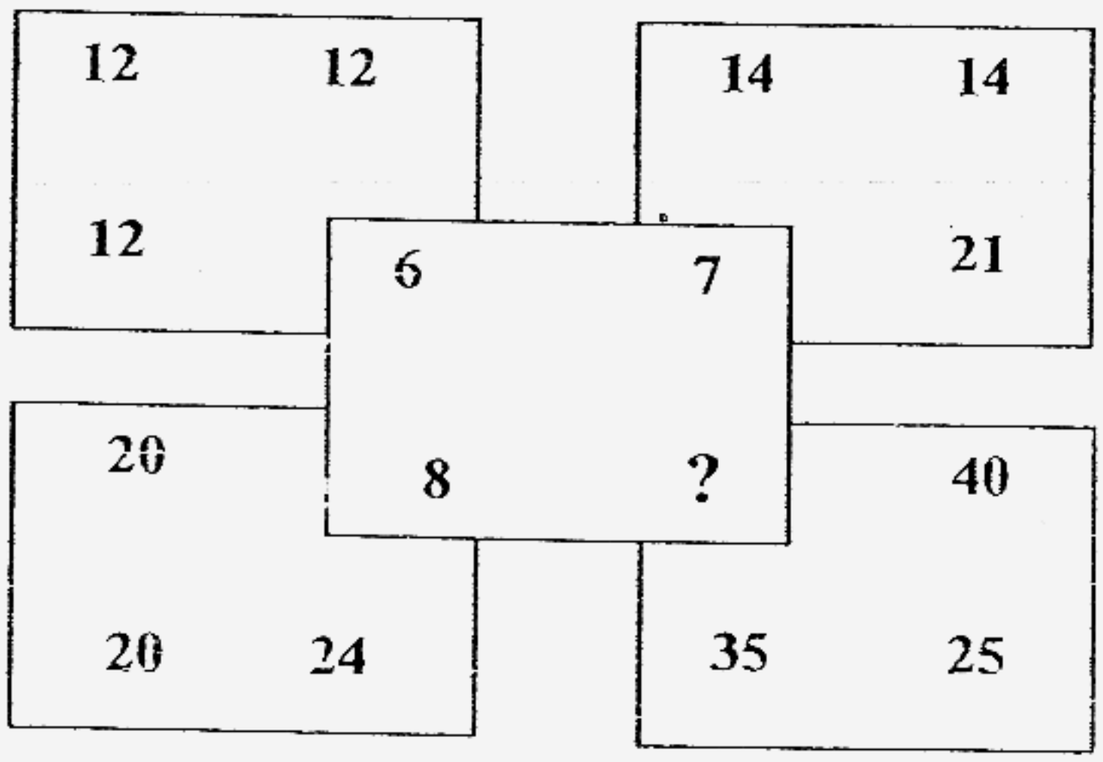
Peter has $\frac{1}{2}$ of what Melissa and Norman have.

How much money does Peter have ?

Ans : _____(3m)

41. Study the number pattern carefully. What is the missing number?

[Show your workings clearly to show how the numbers are related in this pattern.]



Ans : _____(3m)

42. The ratio of the number of stamps that Doris has to the number that Ellen has to the number that Fiona has is 3 : 2 : 7. The three girls have 480 stamps altogether. If Fiona gives 10% of her stamps to Ellen and $\frac{1}{3}$ of the remainder to Doris, what fraction of the total stamps will Fiona have left?

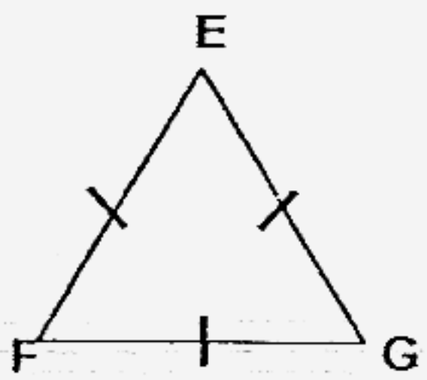
Answer: _____ (4m)

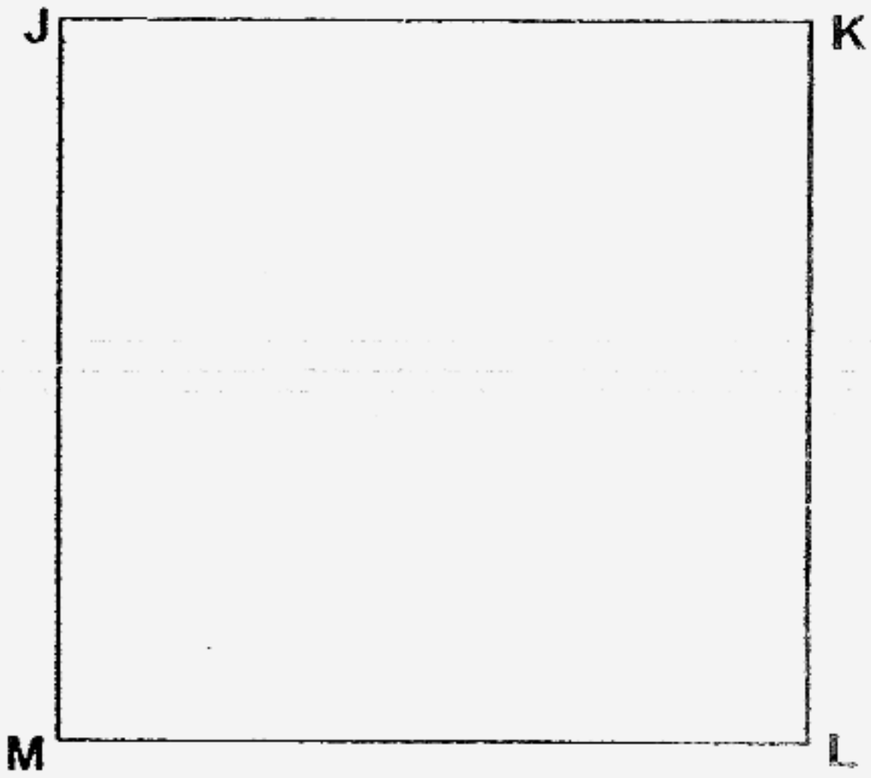
43. EF : JM = 1 : 4 .

The **sum** of the perimeters of Δ EFG and square JKLM is 76 cm.

a) What is the perimeter of the triangle?

b) What is the area of the square?





Answer: a)_____(2m)

b) _____ (2m)

44. Chenghua spent $\frac{2}{7}$ of his money on 4 pencils and 8 books.

She then spent the remaining amount of money on 6 pencils 10 pens and 12 books.

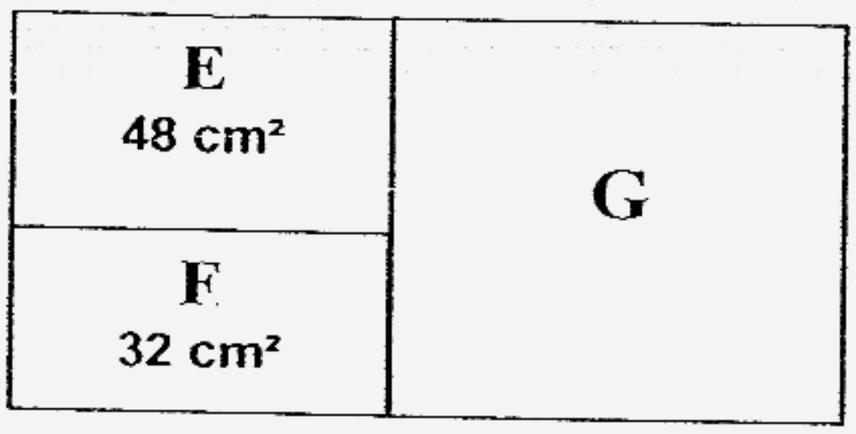
How many pens can she buy with $\frac{6}{7}$ of her money?

Answer: _____(4m)

45. The figure is made of 2 rectangles, E and F, and a square, G.
The difference between the breadths of the 2 rectangles is 2 cm.
The lengths of all the sides of the square and rectangles are whole numbers.

a) Find the area of G.

b) Find the **minimum** length of wire needed to construct the figure.
(Note: Wire is not to be overlapped.)



Ans : a) _____ (3m)

b) _____(2m)

46. John had $60 more than Ken.

Each week John spent $22 and Ken spent $20.

They used up all their money at the same time.

a) How many weeks did they take to spend all their money?

b) How much money did John have **at first**?

Answer : a) _____ (3m)

b) _____ (2m)

47. A housewife bought some apples at 3 for $1 and an equal number of oranges at 40 cents each.

a) If she paid $4 more for the oranges than for the apples, how many apples did she buy?

b) If she put 2 oranges and 3 apples in a packet, how much more money would she need to buy enough fruit for 30 packets?

Answer: a) _____ (2m)

b) _____ (3m)

48. There were 12 more girls than boys in a club.

$\frac{1}{3}$ of the girls and $\frac{1}{4}$ of the boys took part in a competition.

Among those who took part in the competition, there were 6 more girls than boys. What fraction of the club members who did not take part in the competition were boys?

Answer: _____(5m)

End of Paper

1. 2
2. 1
3. 4
4. 4
5. 4
6. 3
7. 3
8. 3
9. 3
10. 2
11. 3
12. 2
13. 3
14. 3
15. 1
16. 37
17. 36kg
18. ½
19. 5
20. 36
21. 440cm
22. shop
23. 13
24. 20m2
25. 350
26. 5
27. 750cm3
28. 27
29. 75%
30. 31°
31. $2.00
32. $4.90
33. 5:2
34. $3.80
35. 50¢
36. $10
37. 1440cm2
38) $62.50
39) $45
40) $108
41) 100
42) 7/20
43) a) 12cm
    b) 256cm2
44) 30 pens
45) a) 100cm2
    b) 24cm
46) a) 30 weeks
    b) $660
47) a) 60 apples
    b) $10
48) 3/7