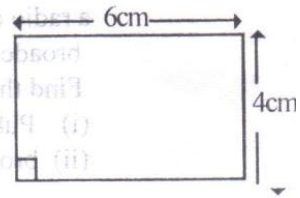1. 3 men take 4 days to dig a drain. Find the number of days that one man takes to finish the said job of work.

2. Simplify $8 \times (-4)$

3. Find the perimeter of the rectangle shown in the diagram
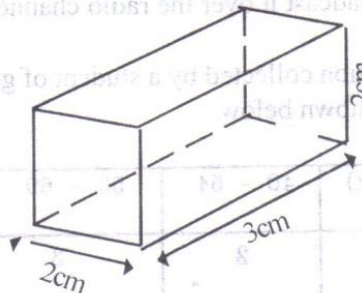
4. Factorise $x^2 - y^2$

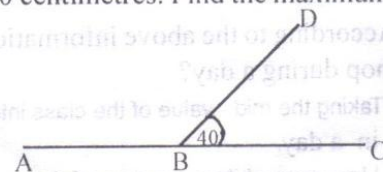5. How much is $\frac{1}{5}$ of Rs 400?

6. The price of a pen is three times that of a pencil. If the price of a pen is Rs 12, find the price of a pencil

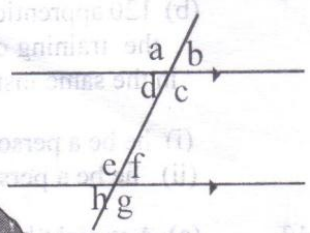7. Find the volume of the cuboid shown in the diagram.

8. The space between two shelves of a rack is 75 centimetres. The height of a tin is 10 centimetres. Find the maximum number of tins that can be placed one over the other, on one shelve of the rack.

9. If the distance between two towns in a map drawn to the scale 1 : 50 000 is 10 cm, find the actual distance between the two towns.

10. In the given diagram ABC is a straight line. Find the value of $A\hat{B}D$

11. 2 metres of poplin is required to sew 4 pillowcases. How many pillowcases can be sewn from 5 metres of the same material?
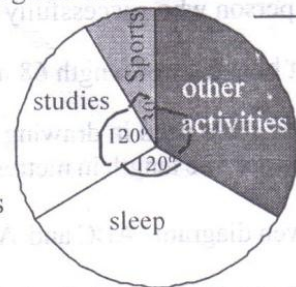
12. Write the number 101_{two} in base ten.

13. Using the data given in the diagram write down two angles equal to angle d.
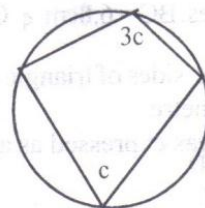
14. The pie - chart shows how Sunil spends the 24 hours on a week day. Accordingly how many hours does Sunil spend for sports on a week day?

15. How much should a person pay as interest if he borrows Rs 5000 for 8 years at 20% simple interest per annum?
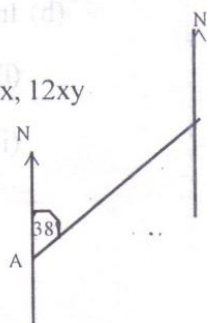
16. Find the value of C in the given diagram

17. Find the least common multiple : 8, 4x, 12xy

18. Simplify $\frac{1}{x} + \frac{3}{2x}$

19. The bearing of B as seen from A is 038^0. Write the bearing of A as seen from B

20. The diagram shows a field book note taken from a Surveyor's field book. If the measyrements are given in metres, find the distance between offsets at the points A and B.
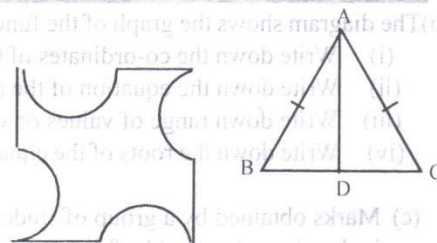
21. Nimal gave $\frac{1}{3}$ of the money he had to his wife and the balance he distributed eqully among his three sons. Find the share that a son received.

22. The steps in solving a simple equation are given below. Fill in th balanks shown.

$$30 - 2(x - 25) = 0$$
$$30 - 2x \ldots\ldots = 0$$
$$-2x = \ldots\ldots\ldots$$
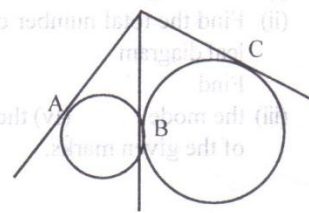$$x = \dfrac{-80}{-2}$$
$$= \ldots\ldots\ldots .$$

23. A Pradeshiya Sabha charges Rs 280 for a quarter as assessment tax for a certain house. If the Pradeshiya Sabha charges 7% of the annual value of the house as assessment tax, find the annual value of the house.

24. In the given diagram, ABC is an isosceles traingle. If the traingles ABD and ACD are congruent, find the value of ADB Give reasos for your answer.

25. From a square plate of side 24 cm long, 4 semi circles each of radius 7 cm are cut and removed as shown in the diagram. Find the perimeter of the diagram.
(The circumference of a circle of radius r is $2\pi r$ take $\pi = \dfrac{22}{7}$)

26. Solve $x^2 + 4x = 0$

27. (i) Write down the median
of the numbers 2, 3, 6, 6, 8
(ii) Find the mean

28. The diagram shows two circles touching externally at B. OA, OB and OC are tangents drawn from an outside point O to the two circles. Show that OA = OC Give reasons.

29. Kamal invested Rs 30 000 to buy Rs 10 shares of a certain company at Rs 15 find.
(i)   the number of shares that Kamal bought
(ii) the nominal value of the shares.
(iii) the percentage at which the company pays the dividend if he received an income of Rs 3600 in one year.
Number of shares ....   Nominal value ....   percentage dividend ....

30. When a sewing machine is bought under higher purchase an interest of 10% per annum has to be paid. The loan another interest has to be paid in 10 equal monthly instalements. If Rs 2400 is paid monthly as a part of the loan, find
(i)   the number of month units for which interest has to be paid
(ii) the total interest that has to be paid.
Number of month units ....   Total interest ....