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Gold Field Public School
Annual Examination
Class: VII

Subject: Math

MM: 70

Section A (10)

1. By what number should $(-8)^{-1}$ be multiplied to get $(-6)^{-1}$?
2. One of the exterior angles of a triangle is 80 and the interior opposite angles are in ratio 5:3. Find the angles of the triangle.
3. In the adjoining figure , l II BC and AB and AC are the transversals. If $\llcorner2 = \llcorner3 = 30$ and $\llcorner1 = \frac{1}{4}\llcorner2$. Then what will be the measure of $\llcorner$B.
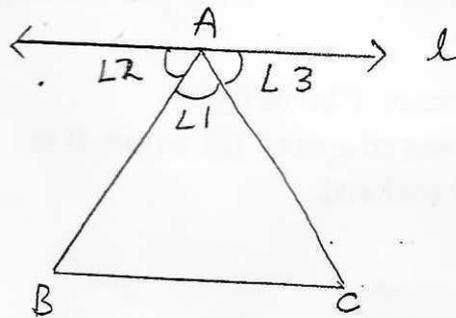
4. ABCD is a Rhombus in which AC = 16cm and BD = 12cm . Find the perimeter of the rhombus.
5. An equilateral triangle with side 13.2 cm is rebent to form a circular ring. Find the radius of ring so formed.

Section : B(30)

1. Simplify

   If $\frac{a}{b} = \left(\frac{3}{5}\right)^{18} \div \left(\frac{3}{5}\right)^{16}$. find the value of $\left(\frac{a}{b}\right)^2$

2. Ishita sold a book worth ₹200 at a profitt of 20 % to Rohan. Rohan sells it a loss of 10 % to Rishi. What did pay for his book ?

1

3. Find the interest on ₹25,000 for a period of 4 years at the rate of 9% per annum. Also, find the amount to be paid at the end of the year.

4. In the given figure, ABC is a triangle. The line through A is parallel of BC. Find the value of x,y,z.
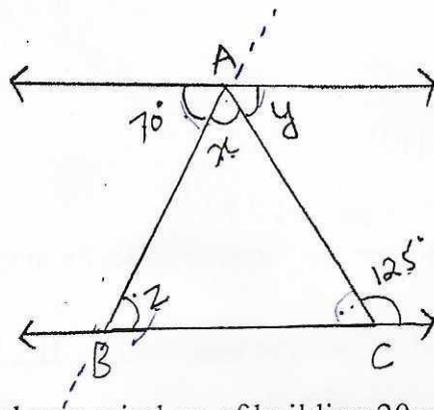

5. A ladder 25m long reaches a window of building 20m above the ground. Determine the distance of the foot of the ladder from the building.

6. The long side of a parallelogram is 8cm. if the shorter side is $\frac{3}{4}$ of the longer side, find the perimeter of the parallelogram.

7. The area of circle is equal to its circumference. Find its radius.

8. A wire bend in the form of a square encloses an area of 121 sq.cm. if the same wire is bent in the form of circle. Find the area it enclosed.
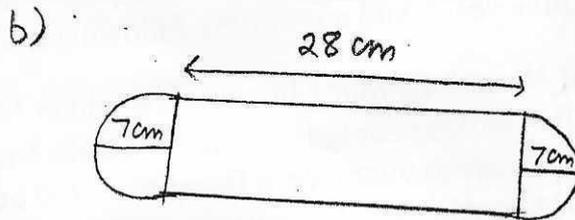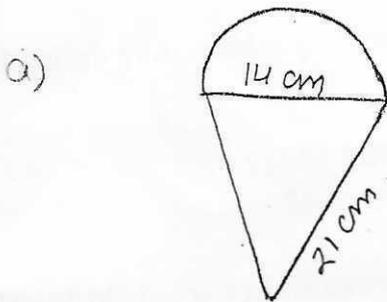
9. Calculate the area
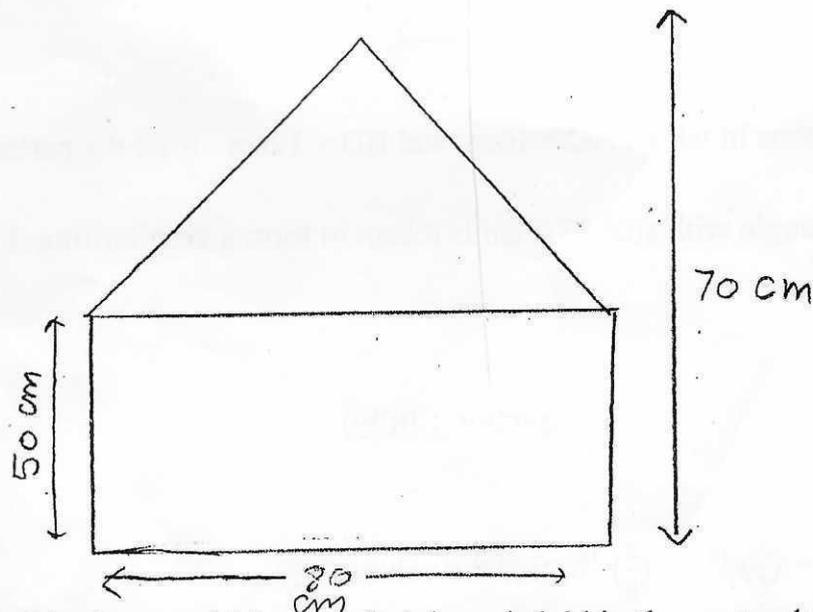
10. A rectangular field is 20m long and 16m broad. A lawn is laid in the centre, leaving a 2m broad path all around. Find the area of inner lawn and the path. The path is to be paved at the rate of ₹20 per sq.m. find the cost of paving the path.

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Section : C (20)

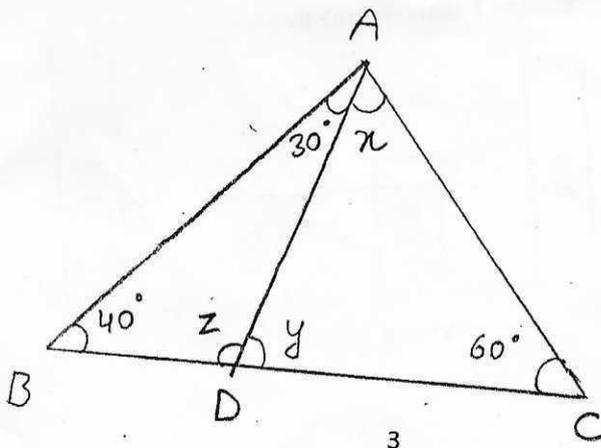1. Find the area
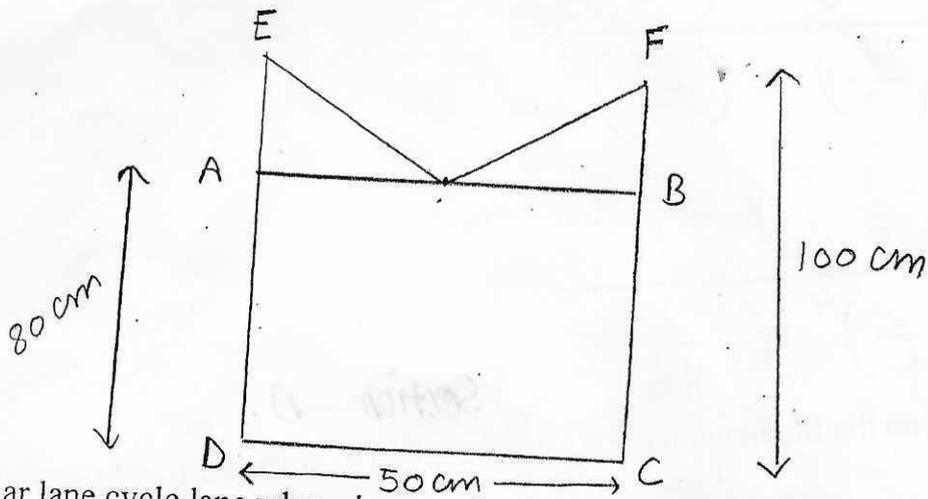
2. On a circular lane cycle lane whose inner radius is 50m and outer radius is 71m, soil prepration is to be done at the cost of ₹ 2/m². Find the expenditure incurred.

3. Find the perimeter

a)

14 cm
21 cm

b)

28 cm
7cm   7cm

4. In the figure , find x , y, z.

3

5. Simplify

i)
$$\frac{\left(\frac{4}{7}\right)^5 \times \left(\frac{-2}{3}\right)^4}{\left(\frac{4}{9}\right) \times \left(\frac{4}{7}\right)^3}$$

ii)
$$\frac{\left(\frac{-1}{2}\right)^4 \times \frac{625}{16}}{\left(\frac{5}{2}\right)^4 \times \frac{1}{16}}$$
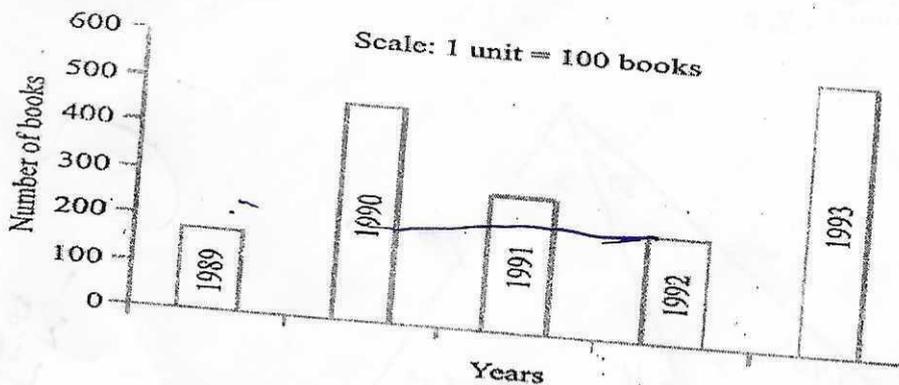
Section –D

6. The scores on the Mathematics test (out of 25) of 15 students are as follows: **5**

19, 25, 23, 20, 9, 20, 15, 10, 5, 16, 25, 20, 24, 12, 20

Find the mean, mode and median of this data. Are they the same?

7. Read the bar graph , which shows the number of books sold by a bookstore during five consecutive years, and answer the following questions. **5**

(i) About how many books were sold in 1989, 1990 and 1992?

(ii) In which year was about 475 books and 225 books sold?

(iii) In which years were fewer than 250 books sold?

(iv) Can you explain how you would estimate the number of books sold in 1989?

Scale: 1 unit = 100 books

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