

**DELHI PUBLIC SCHOOL
BOKARO STEEL CITY**

ASSIGNMENT FOR THE SESSION 2013-2014

Class: VII

Subject : Mathematics

Assignment No. 3

- 1) Show that in an isosceles triangle, angles opposite to equal sides are equal.
- 2) If $\triangle ABC \cong \triangle FED$ under the correspondence $ABC \leftrightarrow FED$, write all the corresponding congruent parts of the triangles.
- 3) Arun bought a car for Rs 3,50,000. The next year, the price went upto Rs 3,70,000. What was the percentage of price increase.
- 4) Amina buys a book for Rs 275 and sells it at a loss of 15%. How much does she sell it for?
- 5) What rate gives Rs 280 as interest on a sum of Rs 56,000 in 2 years?
- 6) How many lines of symmetry are there in:-
a) Rectangle b) Square c) Isosceles triangle d) Circle.
- 7) Find the order of rotational symmetry of :-
a) A square b) An equilateral triangle c) A parallelogram.
- 8) Draw a net of i) a cuboid of dimension 3cm X 2cm X 1cm. ii) a cube of edge 3cm.
- 9) Construct isosceles right-angled triangle ABC, where $m\angle ACB = 90^\circ$ and $AC = 6\text{cm}$.
- 10) Construct $\triangle ABC$ in which $AB = 3\text{cm}$, $BC = 5\text{cm}$ and $\angle B = 60^\circ$. Also, write the steps of construction.
- 11) Find the mean, median and mode of the following data:-
13, 16, 12, 14, 19, 12, 14, 13, 14, 14
- 12) The following table gives the number of students classified according to their favourite subjects:-

Subjects	English	Hindi	Maths.	Science	Social Science
No. of students	30	35	40	25	30

Construct a bar graph to represent this data.
- 13) A bag contains 75 red balls, 25 green balls and 90 blue balls. A ball is taken out from the bag at random. What is the probability that this ball is not a blue ball?
- 14) From a circular sheet of radius 4cm, a circle of radius 3cm is removed. Find the area of the remaining sheet. (Take $\pi = 3.14$)
- 15) Two cross roads, each of width 10cm, cut at right angles through the centre of a rectangular park of length 700m and breadth 300m and parallel to its sides. Find the area of the roads. Also, find the area of the park excluding cross roads. Give the answer in hectares.
- 16) Find the breadth of a rectangular plot of land, if its area is 440m^2 and the length is 22m. Also, find its perimeter.

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