VIDYANIKETAN COACHING CLASSES, GHANSAWANGI

Class:-10th | Mark's:- 25

Sub.:- Math-2 | Time:- 1:30M

Q.1) Answer the following question. **[10]**

i.) Construct a triangle whose perimeter is 13.5 cm and the ratio of the three sides is 2 : 3 : 4.

ii.) Draw a line segment of length 6 cm. Using compasses and ruler, divides it in the ratio 3 : 4.

iii.) $\Delta ABC \sim \Delta PQR$, in D ABC, AB = 5.4 cm, BC = 4.2 cm, AC = 6.0 cm. AB:PQ=3:2.Construct Δ ABC and Δ PQR.

iv.) Draw an angles of 105°and draw their bisectors.

v.) Draw an angle of 75° and construct an angle congruent to the given angle.

Q.2) Answer the following question. {any-5} **[15]**

i.) Draw a Δ ABC in which AB = 5 cm, BC = 6 cm and ∠ABC = 60°. Then construct a triangle whose sides are $\frac{5}{7}$ times the corresponding sides of ΔABC.

ii.) Draw two tangents to a circle of radius 3.5 cm, from a point P at a distance of 6.2 cm from its centre.

iii.) Construct any ΔABC. Construct ΔA'BC' such that AB : A'B = 5:3 and ΔABC ~ΔA'BC'.

iv.) Draw a triangle ABC with side BC = 6 cm, ∠C = 30° and ∠A = 105°. Then construct another triangle whose sides are $\frac{2}{3}$ times the corresponding sides of ΔABC.

v.) Draw two concentric cirlces of radii 3 cm and 5 cm. Construct a tangent to smaller circle from a point on the larger circle.

vi.) Draw a triangle with sides 4 cm, 5 cm and 6 cm. Then construct another triangle whose sides are 2/5 of the corresponding sides of given (first) triangle.

vii.) Draw a circle of radius 3 cm. From a point P, 7 cm away from its centre draw two tangents to the circle. Measure the length of each tangent.

Best of luck.....
