Subject: - Mathematics

PRACTICE PAPER

CBSE-7th

Topic: - TRIANGLES & ITS PROPERTIES

1. If the angles of a triangle are in the ratio of 1 : 2 : 3, determine three angles. **Ans.** $x = 30°$

2. the angles of a triangle are $(x - 40)°, (x - 20)°$ *and* $\left(\frac{1}{2}x - 10\right)°$. Find the value of x. **Ans.** $x = 100°$

3. The angles of a triangle are arranged in ascending order of magnitude. If the difference b/w two consecutive angles is 10°. Find the three angles. **Ans.** $x = 50°$

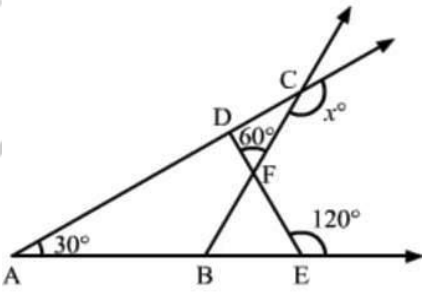
4. If each angle of a triangle is less than the sum of the other two, show that the triangle is acute angled.

5. In ΔABC If $3\angle A = 4\angle B = 6\angle C$. Calculate the angles. **Ans.** $\angle A = 80°, \angle B = 60°, \angle C = 40°$

6. In $\Delta ABC, \angle A = 50°, \angle B = 70°$ and bisector of $\angle C$ meets AB in D. Find the angles of a ΔADC and ΔBDC. **Ans.** $\angle ADC = 100°, \angle BDC = 80°$

7. The bisector of the acute angles of a right triangle meet at O. Find the angles at O b/w the two bisectors. **Ans.** $\angle AOC = 135°$

8. In fig. measure of some angles are indicated. Find the value of x. **Ans.** $x = 150°$



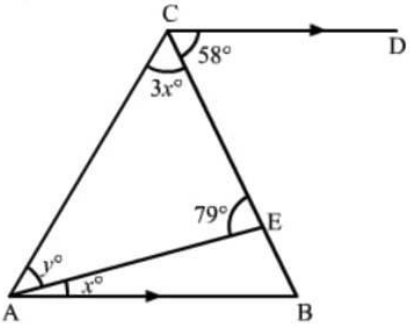
9. Ina ΔABC, AD is the altitude from A such that AD = 12 cm, BD = 9cm and DC = 16 cm. Examine if ΔABC is right angled at A. **Ans. Yes**

10. Two poles of heights 6 m and 11 m stand on a plane ground. If the distance b/w their feet is 12 m, find the distance b/w their tops. **Ans. 13 m.**

11. In fig. if $AB \parallel CD$, find the values of x and y. **Ans.** $x = 21°, y = 38°$

12. In fig. If $AB \parallel CD$ and $AE \parallel BD$, find the value of x. **Ans. 48°**

Q.11.



Q.12.