UNIT 06: LINES & ANGLES

Multiple Choice Questions:

Choose the correct answer from the given four options in the following questions

1. Two parallel lines intersected by a transversal alternate interior angles are:

   (a) Equal (b) not equal (c) zero (d) none

2. For two parallel lines intersected by a transversal sum of interior angles on the same side of a transversal is:

   (a) 90^0 (b) 120^0 (c) 180^0 (d) 80^0

3. In a triangle exterior angle is always greater than

   (a) Interior opposite angles (b) third angle (c) 90^0 (d) none

4. In a triangle, if the sum of two angles is equal to the third angle then triangle is:

   (a) Right triangle (b) Equilateral (c) Both a &b (d) none

5. Two angles whose measure is 90^0 are called:
   (a) Complementary angles (b) Supplementary angles
   (c) Linear pair (d) none

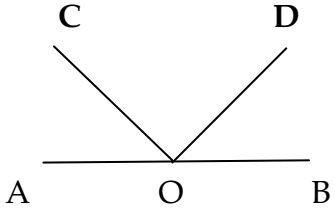
Fill in the blanks:

Complete the following sentences:

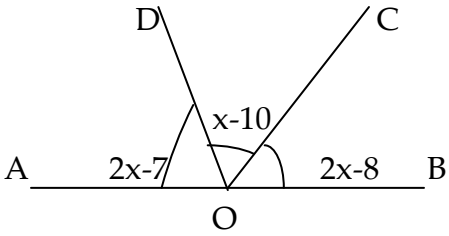
1. Sum of three angles of a triangle is ----------.
2. If two lines intersect each other, then the vertically opposite angles are ------
3. Two lines parallel to the same line are ---------- to each other.
4. Two distinct points in a plane determine a ---------- line.
5. A line contains ----------many points.

Subjective Questions:

1. In given fig. if <AOC + <BOD =75^0.Find <COD.



2. AOB is a line .Determine <BOC, <COD and <AOD.



3. Prove that sum of angles of a triangle is 180^0.
4. Prove that the bisectors of the angles of a linear pair are at right angles.
5. An exterior angle of a triangle is 115^0 and one of the interior opposite angle is 35^0. Find the other two angles.

HOTS Questions:

1. One of the angles of a triangle 65^0. Find the remaining two angles, if their difference is 25^0.
2. The greatest angle of a triangle is 30^0more than the least and the third angle is 15^0 less than the greater .Find the angles of the triangle.

Project Work:

To find the mid-point of a line segment and the perpendicular bisector of a line segment by using paper folding.