1. Fill in the blanks.

1. A line is made up of___2___points.
2. In a line segment XY, the points X & Y are called the___end points of the segments.
3. One & the only one line can be drawn through___2___points.
4. _Parallel_ lines do not intersect each other.
5. The curve which does not cross itself is called _simple curve_ .
6. A closed figure made up of line segments is called a _polygon_ .
7. A polygon with the least no. of sides is called a _triangle_ .

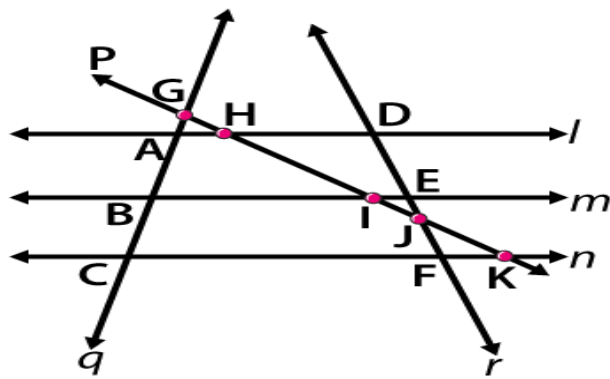**2. Answer the following questions based on the given figure.**
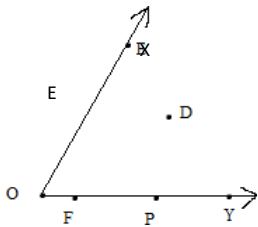
1. ∟XOY is an_____.
2. _____is the vertex of ∟XOY.
3. OX & OY are called the_____.
4. ____,____,____&_____are the points on the ∟XOY.
5. The point_____lie on the interior of ∟XOY.
6. The point _____is on the exterior of ∟XOY.

3. From the figure, name any four rays:
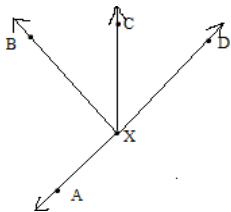

4. **From Fig. 10.21, write**

(i) all pairs of parallel lines.

(ii) all pairs of intersecting lines.

(iii) lines whose point of intersection is I.

(iv) lines whose point of intersection is D.

(v) lines whose point of intersection is E.

**(vi) lines whose point of intersection is A.**

Solution:

(i) All pairs of parallel lines are (l, m); (m, n); (l, n).

(ii) All pairs of intersecting lines are (l, p); (m, p); (n, p); (l, r); (m, r); (n, r); (p, r); (l, q); (m, q); (n, q); (q, p); (q, r).

(iii) Lines whose point of intersection is I are m, p.

(iv) Lines whose point of intersection is D are l, r.

(v) Lines whose point of intersection is E are m, r.

(vi) Lines whose point of intersection is A are l, q.

5. **Classify the following curves as open or closed:**
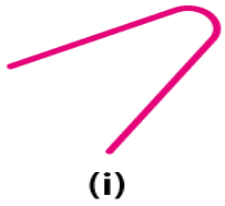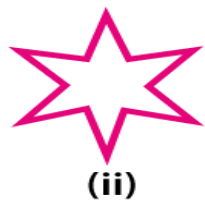
(i)   **(ii)**   **(iii)**

(iv)   **(v)**   **(vi)**

6. Answer the following questions.

i)   Is ABCDEF a polygon?

ii)   How many sides does it have? Name them also?