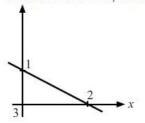
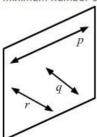


Basic Geometrical Concepts Ex 10.1 Q21 Answer:

Maximum number of points of intersection of three lines in a plane will be three.



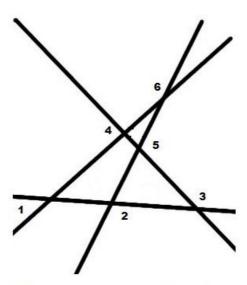
Minimum number of points of intersection of three lines in a plane will be zero.



Basic Geometrical Concepts Ex 10.1 Q22

Answer:

Maximum number of points of intersection of four lines in a plane will be six.



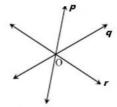
Minimum number of points of intersection of four lines in a plane will be zero.



Basic Geometrical Concepts Ex 10.1 Q23

Answer:

We have:

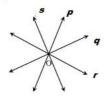


Thus, lines p, q and r intersect at a common point O.

Also, lines p, r and s are concurrent.

Therefore, lines p, r and s intersect at a common point. But q and r intersect each other at O. So, s, q and r intersect at O.

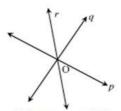
Hence, p, q, r and s are concurrent. Lines p, q, r and s intersect at O.



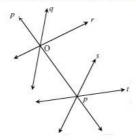
Basic Geometrical Concepts Ex 10.1 Q24

Answer:

Lines p, q, and r are concurrent. So, lines p, q and r intersect at a common point O.



Given lines p, s and t are concurrent. So, lines p, s and t also intersect at a common point. However, it is not always true that q, r and s or q, r and t are concurrent.



Basic Geometrical Concepts Ex 10.1 Q25

Answer:

- (i) A page of a book is a physical example of a plane.
- (ii) An ink pot has both curved and plane surfaces.
- (iii) Two lines in a plane are either parallel or are intersecting.

Basic Geometrical Concepts Ex 10.1 Q26

Answer:

- (i) False
- (ii) True

(iii) False

They may be parallel.

(iv) True

(v) False

In every vertical plane there must be horizontal line.

e.g.:-Intersecting line of a wall and floor of a room is horizontal line and it is also a line on the wall that is on the vertical plane.

(vi) False

Counter example:-Intersecting line of a wall and floor of a room is horizontal line and it is also a line on the wall that is on the vertical plane.

(vii) True

(viii) False

They can be parallel line also.

(ix) False

Through a point of concurrence, at least three lines should pass.

(x) True

(xi) False

Here ABCD is in one plane and DPQ may be in different plane and they may be intersecting through the point ${\tt D}.$

(xii) False

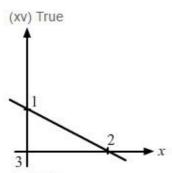
Two lines are either intersecting at one point or they may be parallel lines or they may be coincident lines.

(xiii) False

Through a given point infinite line can be drawn.

(xiv) False

Points are collinear only if all points are in the same plane.



(xvi) False

Minimum number of points of intersection of three lines be zero.

