



### Basic Geometrical Concepts Ex 10.1 Q16

**Answer :**

No  $p$ ,  $q$  and  $r$  are not necessarily coplanar.

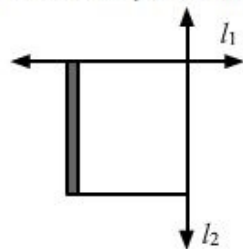
e.g.:- If we take  $p$  as intersecting line of two consecutive walls of a room,  $q$  as a line on the first wall and  $r$  on the second wall whose (both walls) intersection is line  $p$ .

Then we can see that  $p$ ,  $q$  and  $r$  are not coplanar.

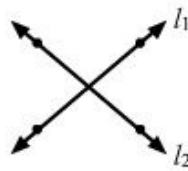
### Basic Geometrical Concepts Ex 10.1 Q17

**Answer :**

(i) Three examples of intersecting lines in our environment:



Two adjacent edges of your notepad



The letter X of the English alphabet



Crossing-roads

(ii) Three examples of parallel lines in our environment:



The cross-bars of this window



The opposite edges of ruler (scale)

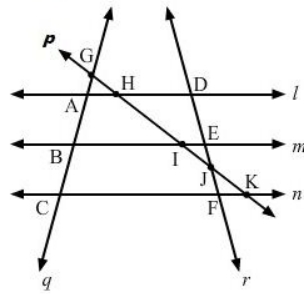


Rail lines

### Basic Geometrical Concepts Ex 10.1 Q18

**Answer :**

We have:



- (i) All pairs of parallel lines:  $(l, m)$ ,  $(m, n)$  and  $(l, n)$
- (ii) All pairs of intersecting lines:  $(l, p)$ ,  $(m, p)$ ,  $(n, p)$ ,  $(l, r)$ ,  $(m, r)$ ,  $(n, r)$ ,  $(l, q)$ ,  $(m, q)$ ,  $(n, q)$ ,  $(q, p)$  and  $(q, r)$
- (iii) Lines whose point of intersection is I:  $(m, p)$
- (iv) Lines whose point of intersection is D:  $(l, r)$
- (v) Lines whose point of intersection is E:  $(m, r)$
- (vi) Lines whose point of intersection is A:  $(l, q)$
- (vii) Collinear points:  $(G, A, B \text{ and } C)$ ,  $(D, E, J \text{ and } F)$ ,  $(G, H, I, J \text{ and } K)$ ,  $(A, H \text{ and } D)$ ,  $(B, I \text{ and } E)$ , and  $(C, F \text{ and } K)$

#### Basic Geometrical Concepts Ex 10.1 Q19

**Answer :**

From the given figure, we have:

Concurrent lines can be defined as three or more lines which share the same meeting point.  
Clearly lines  $n$ ,  $q$  and  $l$  are concurrent with A as the point of concurrence.  
Lines  $m$ ,  $q$  and  $p$  are concurrent with B as the point of concurrence.

#### Basic Geometrical Concepts Ex 10.1 Q20

**Answer :**

From the given figure, we have:

- (i) Six lines can be drawn through these four points as given in the figure.
- (ii) These lines are AB, BC, CD, AD, BD and AC.
- (iii) Lines which are concurrent at A are AC, AB and AD.

\*\*\*\*\* END \*\*\*\*\*