

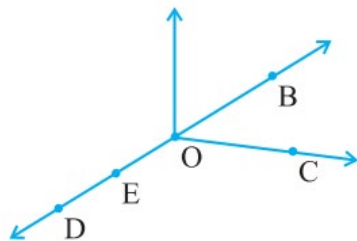


## CLASS NOTES-ANSWERS

### EXERCISE 4.1

1. Use the figure to name :

- (a) Five points    (b) A line    (c) Four rays    (d) Five line segments



Answer:

- (a) The five points are O, B, C, D, and E.  
 (b) The Line is BD.  
 (c) The four rays are OC, OB, OE, and OD.  
 (d) Five line segments are OE, ED, OD, OB, and EB.

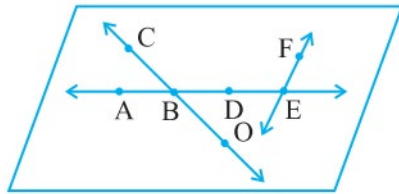
2. Name the line given in all possible (twelve) ways, choosing only two letters at a time from the four given.



Answer: The line can be named as, AB, AC, AD, BA, BC, BD, CA, CB, CD, DA, DB, and DC.

3. Use the figure to name :

- (a) Line containing point E.                      (b) Line passing through A.  
 (c) Line on which O lies                              (d) Two pairs of intersecting lines.



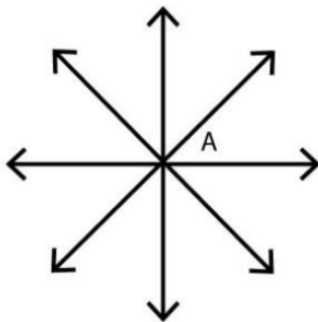
Answer:

- (a) The line containing point E is EF.
- (b) The line passing through A is AE.
- (c) The line on which O lies is CO.
- (d) The two pairs of intersecting lines are CO, AE, and EF, AE.

4. How many lines can pass through (a) one given point? (b) two given points?

Answer:

- (a) An Infinite number of lines can pass through one point.



- (b) Only one unique line passes through two given points.



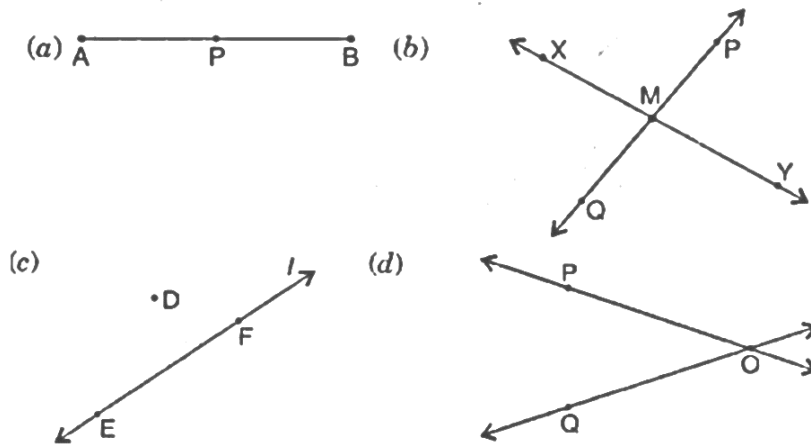
5. Draw a rough figure and label suitably in each of the following cases:

- (a) Point P lies on AB.
- (b) XY and PQ intersect at M.
- (c) Line l contains E and F but not D.



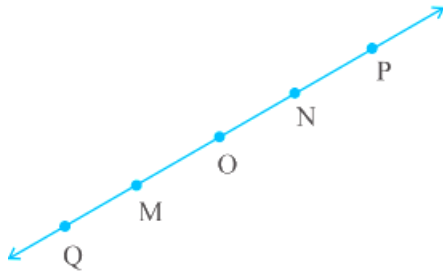
(d) OP and OQ meet at O.

Answer:



6. Consider the following figure of line MN. Say whether following statements are true or false in context of the given figure.

- (a) Q, M, O, N, P are points on the line MN.
- (b) M, O, N are points on a line segment MN.
- (c) M and N are end points of line segment MN.
- (d) O and N are end points of line segment OP.
- (e) M is one of the end points of line segment QO .
- (f) M is point on ray OP.
- (g) Ray OP is different from ray QP.
- (h) Ray OP is same as ray OM.
- (i) Ray OM is not opposite to ray OP.
- (j) O is not an initial point of OP.
- (k) N is the initial point of NP and NM.



Answer:

- (a) Q, M, O, N, P are points on the line MN is a true statement.
- (b) M, O, N are points on a line segment MN is a true statement.
- (c) M and N are endpoints of line segment MN is a true statement.
- (d) O and N are endpoints of line segment OP is a false statement.
- (e) M is one of the endpoints of line segment QO is a false statement.
- (f) M is a point on ray OP is a false statement.
- (g) Ray OP is different from ray QP is a true statement.
- (h) Ray OP is different from ray OM is a false statement.
- (i) Ray OP is not opposite to ray OM is a false statement.
- (j) O is not an initial point of OP is a false statement.
- (k) N is the initial point of NP and NM is a true statement.