



NCERT solutions for class-8 maths Introduction to graphs Ex-15.2

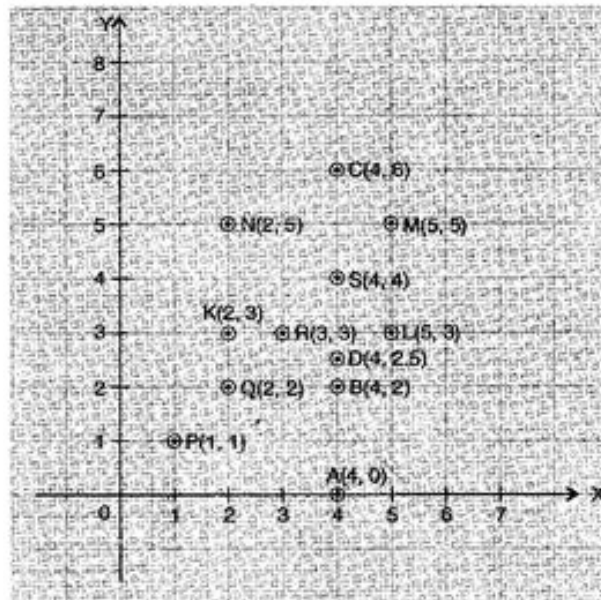
**Q1.** Plot the following points on a graph sheet.  
Verify if they lie on a line

(a)  $A(4,0)$ ,  $B(4,2)$ ,  $C(4,6)$ ,  $D(4, 2.5)$

(b)  $P(1,1)$ ,  $Q(2,2)$ ,  $R(3,3)$ ,  $S(4,4)$

(c)  $K(2, 3)$ ,  $L(5, 3)$ ,  $M(5, 5)$ ,  $N(2, 5)$

**Ans.**



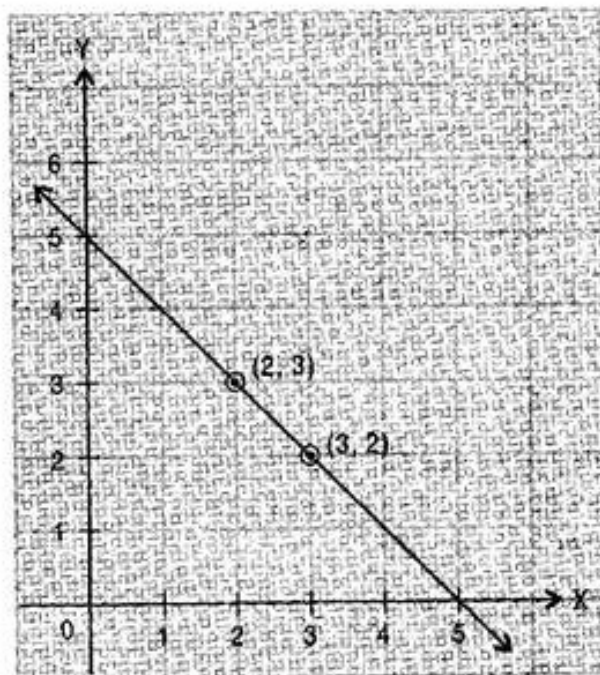
(a) All points A, B, C and D lie on a vertical line.

(b) P, Q, R and S points also make a line. It verifies that these points lie on a line.

(c) These points do not lie in a straight line.

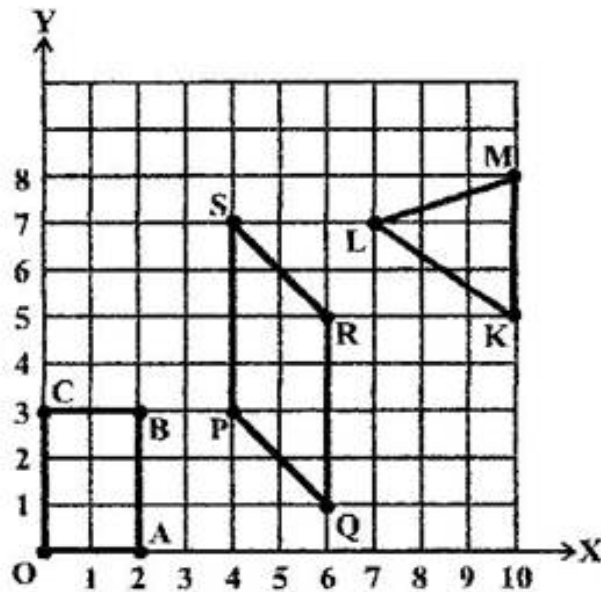
**Q2.** Draw the line passing through  $(2, 3)$  and  $(3, 2)$ . Find the coordinates of the points at which this line meets the  $x$ -axis and  $y$ -axis.

**Ans.**



The coordinates of the points at which this line meets the  $x$ -axis at  $(5, 0)$  and  $y$ -axis at  $(0, 5)$ .

**Q3.** Write the coordinates of the vertices of each of these adjoining figures.



**Ans.** Vertices of figure OABC

O (0, 0), A (2, 0), B (2, 3) and C (0, 3)

Vertices of figure PQRS

P (4, 3), Q (6, 1), R (6, 5) and S (4, 7)

Vertices of figure LMK

L (7, 7), M (10, 8) and K (10, 5)

**Q4.** State whether True or False. Correct that are false.

(i) A point whose x coordinate is zero and y-coordinate is non-zero will lie on the y-axis.

(ii) A point whose y coordinate is zero and x-coordinate is 5 will lie on y-axis.

(iii) The coordinates of the origin are (0, 0).

**Ans.** (i) True (ii) False, it will lie on  $x$ -axis. (iii) True

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