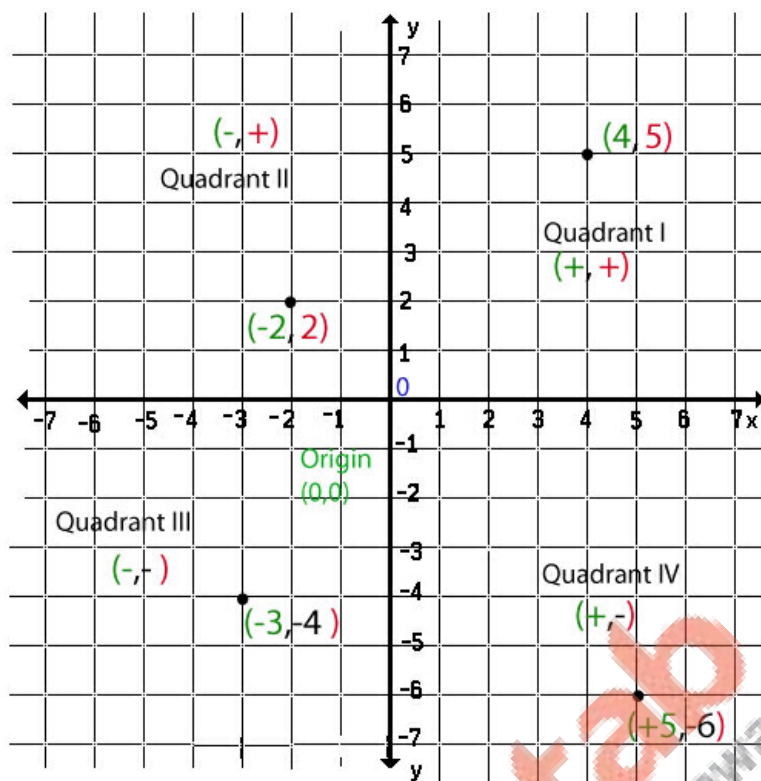


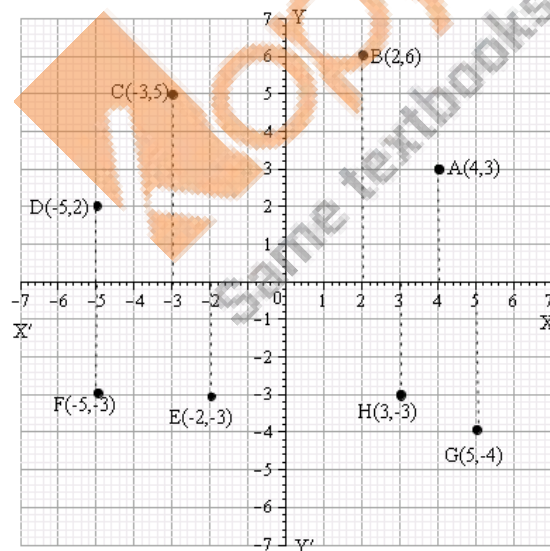
Graphs



Q1.

Answer :

Let $X'OX$ and YOY' be the coordinate axes.



Q2.

- (i) On the x -axis, take 4 units to the right of the y -axis; and then on the y -axis, take 3 units above the x -axis.
Thus, we obtain the point $A(4, 3)$
- (ii) On the x -axis, take 2 units to the right of the y -axis; and then on the y -axis, take 6 units above the x -axis.
Thus, we obtain the point $B(2, 6)$
- (iii) On the x -axis, take 3 units to the left of the y -axis; and then on the y -axis, take 5 units above the x -axis.
Thus, we obtain the point $C(-3, 5)$
- (iv) On the x -axis, take 5 units to the left of the y -axis; and then on the y -axis, take 2 units above the x -axis.
Thus, we obtain the point $D(-5, 2)$
- (v) On the x -axis, take 2 units to the left of the y -axis; and then on the y -axis, take 3 units below the x -axis.
Thus, we obtain the point $E(-2, -3)$
- (vi) On the x -axis, take 5 units to the left of the y -axis; and then on the y -axis, take 3 units below the x -axis.
Thus, we obtain the point $F(-5, -3)$
- (vii) On the x -axis, take 5 units to the right of the y -axis; and then on the y -axis, take 4 units below the x -axis.
Thus, we obtain the point $G(5, -4)$
- (viii) On the x -axis, take 3 units to the right of the y -axis; and then on the y -axis, take 3 units below the x -axis.
Thus, we obtain the point $H(3, -3)$

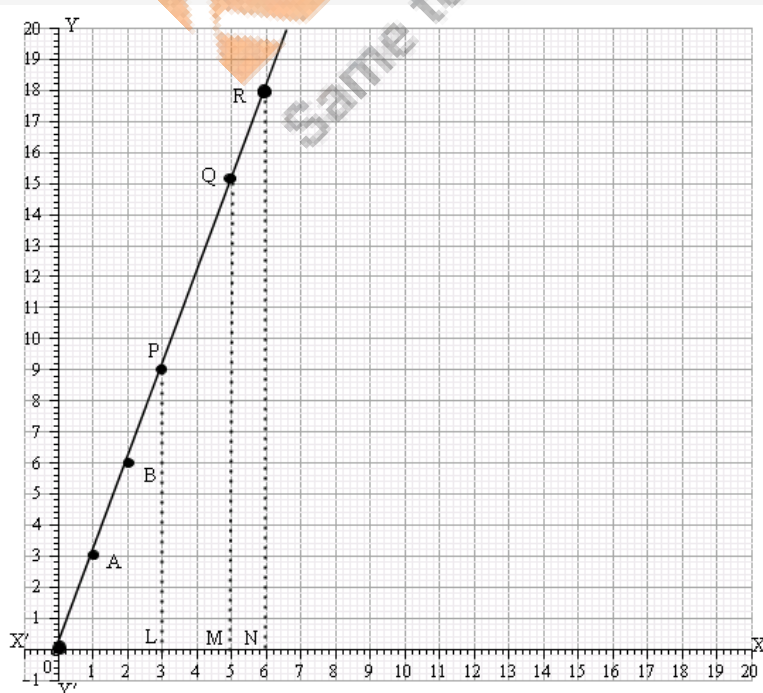
Q3.

Answer :

- (a) The given function is $y = 3x$. For some different values of x , the corresponding values of y are given below:

x	0	1	2
y	0	3	6

On a graph paper, plot the points $O(0, 0)$, $A(1, 3)$ and $B(2, 6)$. Join them successively to obtain the required graph.



(b)

Reading off from the graph

(i) On the x -axis, take the point L at $x = 3$.

Draw $LP \perp x$ -axis, meeting the graph at P .

Clearly, $PL = 9$ units

$$\therefore x = 3 \Rightarrow y = 9$$

(ii) On the x -axis, take the point M at $x = 5$.

Draw $MQ \perp x$ -axis, meeting the graph at Q .

Clearly, $QM = 15$ units

$$\therefore x = 5 \Rightarrow y = 15$$

(iii) On the x -axis, take the point N at $x = 6$.

Draw $RN \perp x$ -axis, meeting the graph at R .

Clearly, $RN = 18$ units

$$\therefore x = 6 \Rightarrow y = 18$$

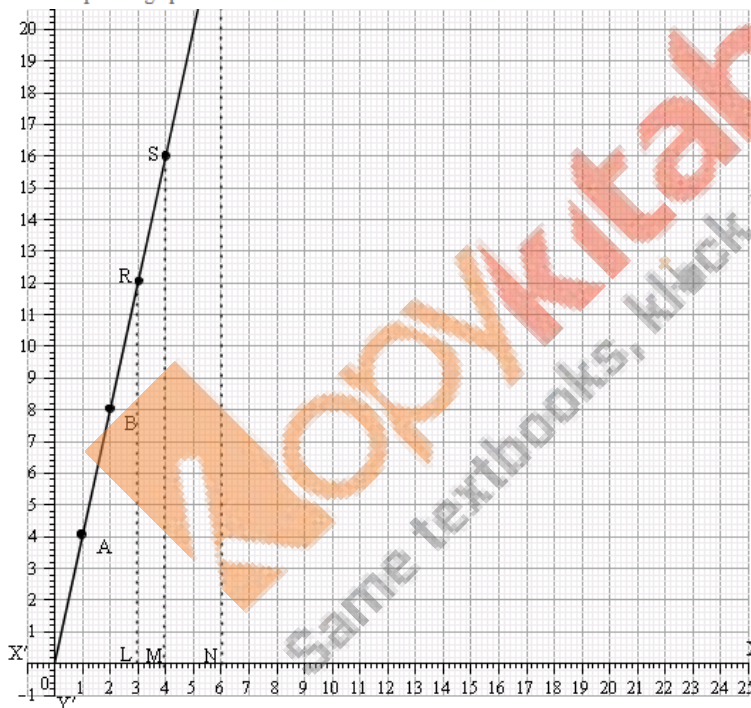
Q2.

Answer :

(a) The given function is $P = 4x$. For some different values of x , the corresponding values of P are given below:

x	0	1	2
P	0	4	8

On a graph paper, plot the points $O(0,0)$, $A(1,4)$ and $B(2,8)$. Join them successively to obtain the required graph.



(b)

Reading off from the graph

(i) On the x -axis, take the point L at $x = 3$.

Draw $LR \perp x$ -axis, meeting the graph at R .

Clearly, $RL = 12$ units

$$\therefore x = 3 \Rightarrow P = 12$$

(ii) On the x -axis, take the point M at $x = 4$.

Draw $MS \perp x$ -axis, meeting the graph at S .

Clearly, $SM = 16$ units

$$\therefore x = 4 \Rightarrow P = 16$$

(iii) On the x -axis, take the point N at $x = 6$.

Draw $NT \perp x$ -axis, meeting the graph at T .

Clearly, $TN = 24$ units

$$\therefore x = 6 \Rightarrow P = 24$$

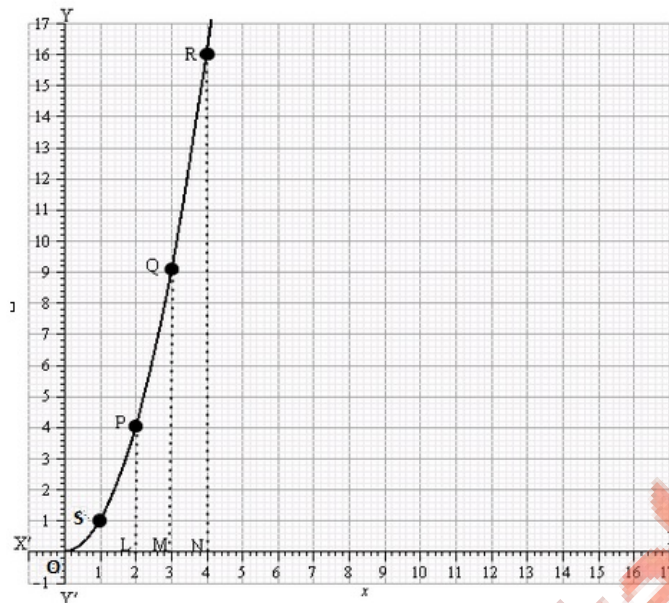
Q3.

Answer :

- (a) The given function is $A = x^2$. For some different values of x , the corresponding values of A are given below:

x	0	1	2
A	0	1	4

On a graph paper, plot the points $O(0,0)$, $S(1,1)$ and $P(2,4)$. Join them successively to obtain the required graph.



(b)

Reading off from the graph

- (i) On the x -axis, take the point L at $x = 2$.

Draw $LP \perp x$ -axis, meeting the graph at P .

Clearly, $PL = 4$ units

$\therefore x = 2 \Rightarrow A = 4$

- (ii) On the x -axis, take the point M at $x = 3$.

Draw $MQ \perp x$ -axis, meeting the graph at Q .

Clearly, $QM = 9$ units

$\therefore x = 3 \Rightarrow A = 9$

- (iii) On the x -axis, take the point N at $x = 4$.

Draw $RN \perp x$ -axis, meeting the graph at R .

Clearly, $RN = 16$ units

$\therefore x = 4 \Rightarrow A = 16$

Graphs RS Aggarwal Class 8 Solutions Ex 25C

Q1.

Answer :

(a)

Since the signs of coordinates are $(+, +)$, the point $P(3, 6)$ lies in the I quadrant.

Q2.

Answer :

- (c) III Since the signs of coordinates are $(-, -)$, the point $(-7, -1)$ lies in the III quadrant.

Q3.

Answer :

- (d) IV Since the signs of the coordinates are $(+, -)$, the point $A(2, -3)$ lies in the IV quadrant

Q4.

Answer :

- (b) II Since the signs of coordinates are $(-, +)$, the point $Q(-4, 1)$ lies in the II quadrant.

Q5.

Answer :

(c) y -axis The abscissa of a point is its distance from the y -axis.

Q6.

Answer :

(d) a line parallel to the x -axis The graph of $y = a$ is a line parallel to the x -axis.

Q7.

Answer :

(a) $x = 0$ The equation representing the y -axis is $x = 0$.

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