



# TRUE FALSE



The point  $(0,0)$  is called the origin.



The point  $(0,0)$  is called the origin.

---

True. The origin is the intersection point of the x-axis and y-axis, defined by coordinates  $(0,0)$ .



# TRUE FALSE



In the ordered pair  $(5, -3)$ , the x-coordinate is 5 and the y-coordinate is -3.



In the ordered pair  $(5, -3)$ , the x-coordinate is 5 and the y-coordinate is -3.

---

True. In any ordered pair  $(x, y)$ , the first number is always the x-coordinate and the second is the y-coordinate.





# TRUE FALSE



The point  $(-2, 4)$  is located in  
Quadrant III.



The point  $(-2, 4)$  is located in Quadrant III.

---

False. Quadrant III requires both coordinates negative.  $(-2, 4)$  has a negative  $x$  and positive  $y$ , placing it in Quadrant II.



TRUE  FALSE



All points on the x-axis have a y-coordinate of 0.



All points on the x-axis have a y-coordinate of 0.

---

True. The x-axis is defined as the set of all points where  $y = 0$ , regardless of the x-coordinate.





# TRUE FALSE



To plot  $(3, 7)$ , you move 3 units left and 7 units up from the origin.



To plot  $(3, 7)$ , you move 3 units left and 7 units up from the origin.

---

False. For  $(3, 7)$ , a positive x-coordinate requires moving right (not left), and positive y requires moving up.



# TRUE FALSE



The point  $(0, -5)$  lies on the y-axis.



The point  $(0, -5)$  lies on the y-axis.

---

True. Any point with x-coordinate 0 lies on the y-axis. Here,  $(0, -5)$  is on the negative y-axis.





TRUE  FALSE



Quadrant I contains points where  
both coordinates are negative.



Quadrant I contains points where both coordinates are negative.

---

False. Quadrant I requires both coordinates positive. Negative coordinates appear in Quadrant III.



TRUE  FALSE



The horizontal axis is called the y-axis.



The horizontal axis is called the y-axis.

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False. The horizontal axis is the x-axis. The vertical axis is the y-axis.





TRUE  FALSE



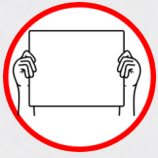
$(4, 0)$  is located in Quadrant I.



$(4, 0)$  is located in Quadrant I.

---

False. Points with y-coordinate 0 lie on the x-axis,  
not in any quadrant.



TRUE  FALSE



Moving down from the origin  
decreases the y-coordinate.



Moving down from the origin decreases the y-coordinate.

---

True. Downward movement from  $(0,0)$  corresponds to negative y-direction, decreasing the y-coordinate value.





# TRUE FALSE



The point  $(-3, -8)$  is in Quadrant IV.



The point  $(-3, -8)$  is in Quadrant IV.

---

False. Quadrant IV has positive  $x$  and negative  $y$ .  
Both negative coordinates place  $(-3, -8)$  in Quadrant  
III.



# TRUE FALSE



Coordinates  $(2, 5)$  and  $(5, 2)$   
represent the same point.



Coordinates  $(2, 5)$  and  $(5, 2)$  represent the same point.

---

False. Order matters in coordinates.  $(2, 5)$  is 2 units right/5 up, while  $(5, 2)$  is 5 right/2 up—different locations.





# TRUE FALSE



A point with coordinates  $(7, -1)$   
lies in Quadrant II.



A point with coordinates  $(7, -1)$  lies in Quadrant II.

---

False. Quadrant II requires negative  $x$  and positive  $y$ .  $(7, -1)$  has positive  $x$  and negative  $y$ , placing it in Quadrant IV.



TRUE  FALSE



The origin has coordinates  $(0, 0)$ .



The origin has coordinates  $(0, 0)$ .

---

True. The origin is defined as the point  $(0,0)$  where both axes intersect.





# TRUE FALSE



If a point is on the positive y-axis,  
its x-coordinate must be negative.



If a point is on the positive y-axis, its x-coordinate must be negative.

---

False. On the positive y-axis, x is always 0 (not negative). Example: (0, 3).



# TRUE FALSE



In Quadrant IV, the x-coordinate is positive and the y-coordinate is negative.



In Quadrant IV, the x-coordinate is positive and the y-coordinate is negative.

---

True. Quadrant IV is characterized by positive x-values and negative y-values.





# TRUE FALSE



Plotting ( -6, 0) requires moving left along the x-axis.



Plotting ( -6, 0) requires moving left along the x-axis.

---

True. Negative x-coordinate (-6) means moving left from origin. y-coordinate 0 means no vertical movement.



# TRUE FALSE



The point  $(3, -4)$  is closer to the x-axis than  $(3, -7)$ .



The point (3, -4) is closer to the x-axis than (3, -7).

---

True. Distance to x-axis is  $|y|$ .  $|-4| = 4$  units, while  $|-7| = 7$  units, so (3,-4) is closer.





# TRUE FALSE



All points in Quadrant II have a positive x-coordinate.



All points in Quadrant II have a positive x-coordinate.

---

False. Quadrant II requires negative x-coordinate  
and positive y-coordinate.



# TRUE FALSE



The vertical axis is used for the x-coordinate.



The vertical axis is used for the x-coordinate.

---

False. The vertical axis (y-axis) corresponds to the y-coordinate. The horizontal axis (x-axis) corresponds to the x-coordinate.