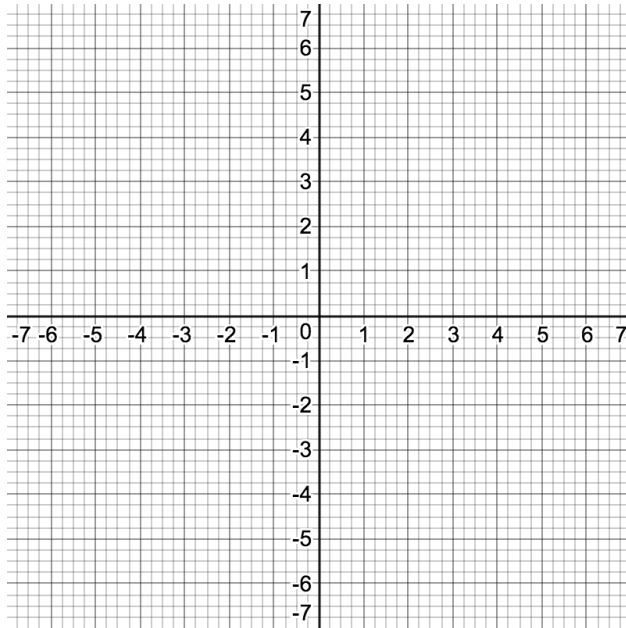


## §P.3 &amp; P.4: The Cartesian Plane, Graphs, &amp; Lines

- 1.] Plot the points  $(-2, 6)$  and  $(3, -6)$  on the Cartesian plane and find the distance between them. Find the midpoint and label it on the plane.



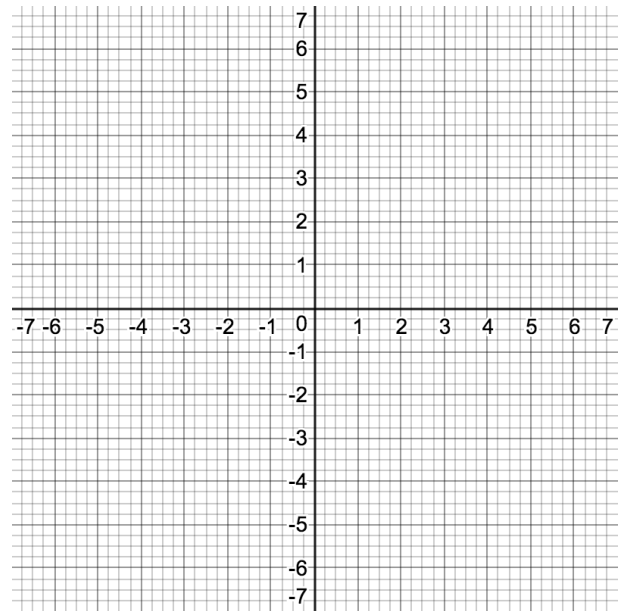
- 2.] Consider the equation given by  $y = x^2 - 3x + 2$ .
- a.) Does the point  $(-2, 8)$  lie on the graph of this equation?
- b.) Find all  $x$ -intercepts of this graph.
- c.) Find the  $y$ -intercept of this graph.

3.] Graph the following linear equations on the plane below:

a.)  $y = 2x - 3$

b.)  $y + 2x - 4 = 0$

c.)  $x = -3$



4.] Find the equation of the line that goes through the points  $(2, -1)$  and  $(-2, 1)$ .

5.] Find the equation of the line that is a) parallel and b) perpendicular to the line  $4x - 2y = 3$  and goes through the point  $(2, 1)$ .