

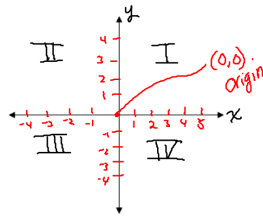
3.1 Coordinate Plane Introduction

coordinate plane - a plane determined by the x axis and y axis

quadrants - named with Roman Numerals

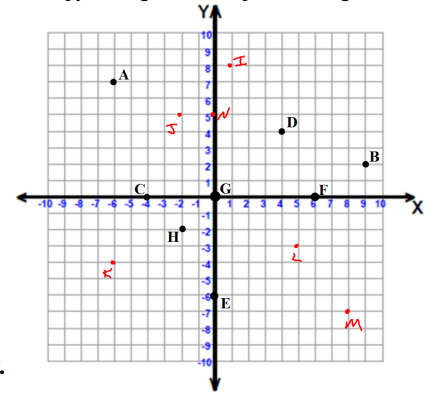
axes - plural for axis
 ↳ labeled and numbered

ordered pair - is used to identify a point in the coordinate plane
 (x, y)
 abscissa
 ordinate



State the coordinates and identify the quadrant for each point.

1. A $(-6, 7)$ II
2. B $(9, 2)$ I
3. C $(-4, 0)$ x-axis
4. D $(4, 4)$ I
5. E $(0, -6)$ y-axis
6. F $(6, 0)$ x-axis
7. G $(0, 0)$ origin
8. H $(-2, -2)$ III



Plot the following points.

- | | | |
|-----------------|-----------------|------------------|
| 9. I $(1, 8)$ | 10. J $(-2, 5)$ | 11. K $(-6, -4)$ |
| 12. L $(5, -3)$ | 13. M $(8, -7)$ | 14. N $(0, 5)$ |

y - intercept: y coordinate where the graph crosses the y axis

*** $x = 0$

x - intercept: x coordinate where the graph crosses the x axis

*** $y = 0$

Identify the x-intercept and y-intercept for each graph.

15.

x intercept

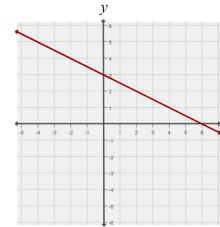
$x = 6$

$(6, 0)$

y intercept

$y = 3$

$(0, 3)$



16.

x intercept

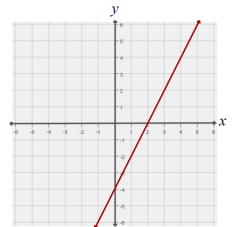
$x = 2$

$(2, 0)$

y intercept

$y = -4$

$(0, -4)$



17.

x intercept

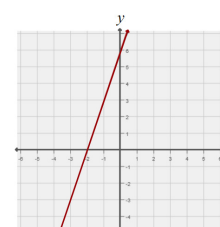
$x = -2$

$(-2, 0)$

y intercept

$y = 6$

$(0, 6)$



18.

x intercept

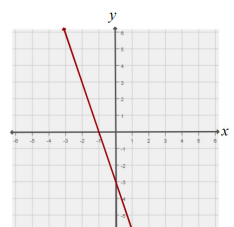
$x = -1$

$(-1, 0)$

y intercept

$y = -3$

$(0, -3)$



HOMEWORK

Worksheet HW 3.1

Coordinate Plane Intro