

Names: _____

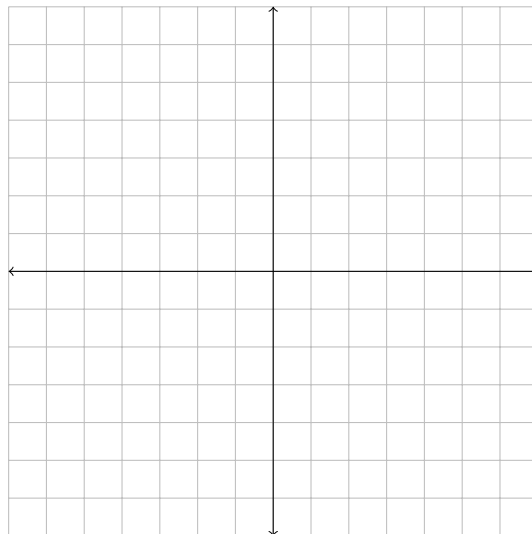
Activity #1: Lines and Circles

College Algebra

1. Find an equation for the line passing through the point $(3, -5)$ and having slope $-1/3$.

2. Find the slope between the points $(3, -1)$ and $(-3, -3)$.

3. Plot the graph of the linear equation $y = \frac{-1}{5}x - 2$ on the plane below.



4. Solve the following system of equations.

$$\begin{cases} -2y + 4x &= 2 \\ 4y + 2x &= 6 \end{cases}$$

5. Solve the following system of equations.

$$\begin{cases} \frac{1}{5}y + \frac{1}{5}x &= 9 \\ \frac{1}{5}y + \frac{2}{5}x &= 6 \end{cases}$$

6. Find an equation for the circle centered at $(1, 4)$ and having radius 2.

7. Find an equation for the circle centered at $(5, -1)$ and passing through $(-1, -5)$.