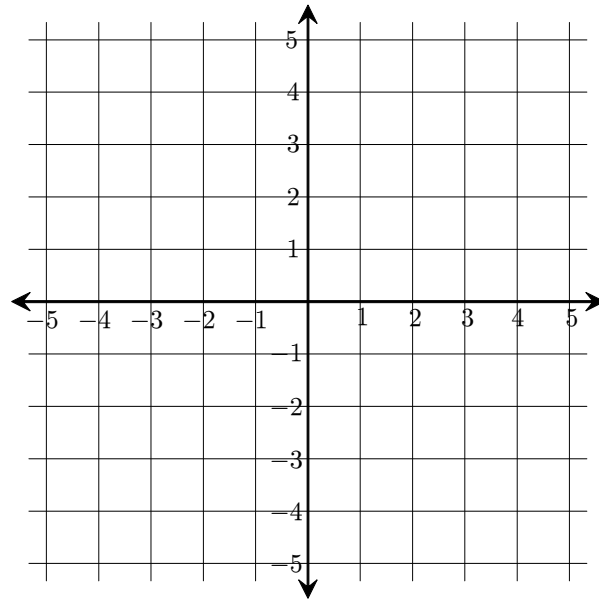


# Algebra Workshop

Name: \_\_\_\_\_

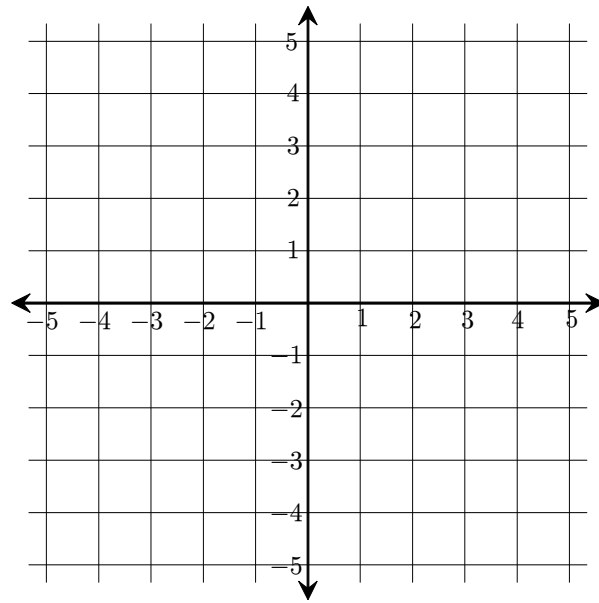
## Homework 7

1. (a) Plot the points  $(-3, -5)$  and  $(2, 5)$  on the following coordinate plane. Draw the line through these points.



- (b) Find the slope of the line.
- (c) Find the equation for the line.
- (d) What is the  $y$ -intercept?
- (e) What is the  $x$ -intercept?

2. (a) On the following coordinate plane, draw the line with slope  $m = \frac{1}{2}$  through the point  $(2, -1)$ .



- (b) Find the equation for the line.
- (c) What is the  $y$ -intercept of this line?
- (d) What is the  $x$ -intercept of the line?

3. Find the equations for the lines through the given points:

(a)  $(-1, -3)$  and  $(1, 5)$

(b)  $(2, 4)$  and  $(4, 5)$

(c)  $(1, 5)$  and  $(1, -3)$

(d)  $(-3, 4)$  and  $(-5, 4)$

4. Consider the line  $5x + 3y = 9$ .

(a) What is the slope of this line?

(b) What is the  $y$ -intercept of this line?

(c) What is the  $x$ -intercept of this line?