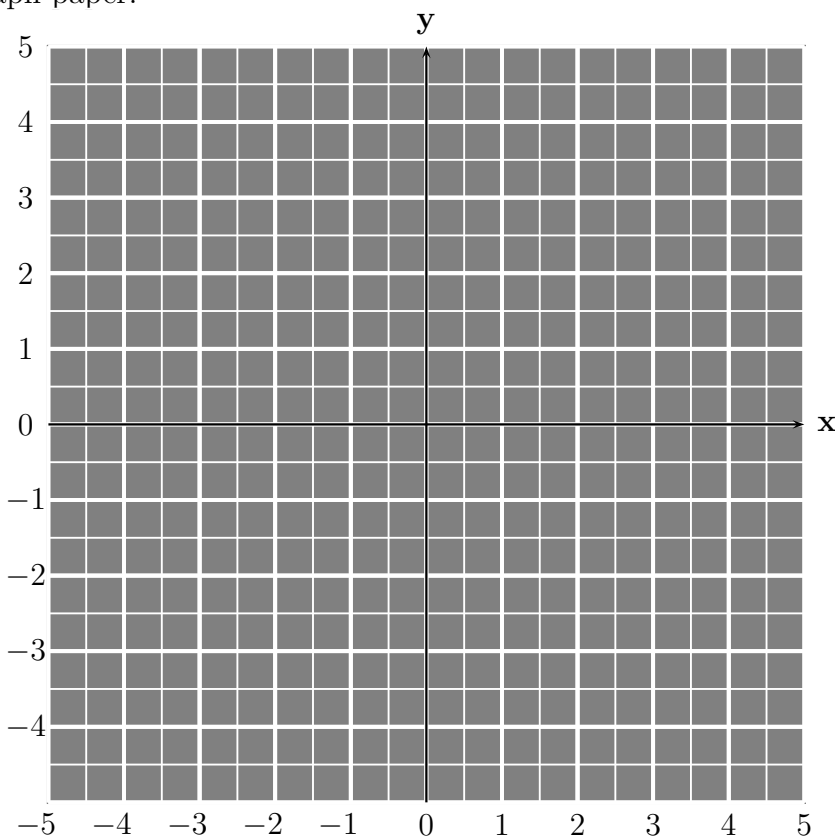


Name: \_\_\_\_\_

**Directions:** You *must* show all your work in the provided space. Simplify your answers whenever possible. Be certain to indicate your final answer clearly.

1. Consider the equation:  $x - y = 3$ . Find five solutions of this equation and graph them in the provided graph-paper.

$x$	$y$



2. Find the midpoint of the segment connecting points  $P = (2, -3)$  and  $Q = (-3, 5)$ .

3. Complete the following table of solutions of the equation  $2x - 5y = 20$

$x$	$y$
0	
	0
1	
5	
	-2

4. (a) Give an example of a linear equation in two variables that has empty solution set.

(b) Give an example of a linear equation in two variables that has infinitely many solutions.

(c) Can you give an example of a linear equation in two variables that has exactly three solutions? Explain.