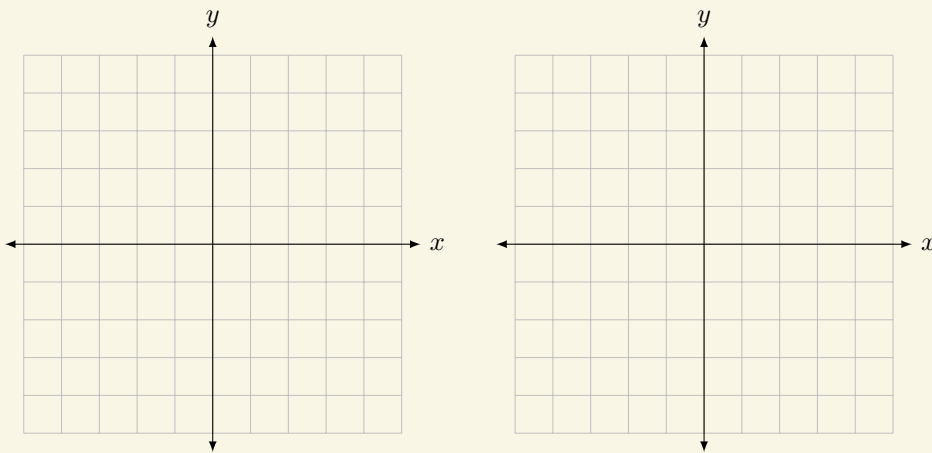


12.1 Lines and the Coordinate Plane - Worksheet 1

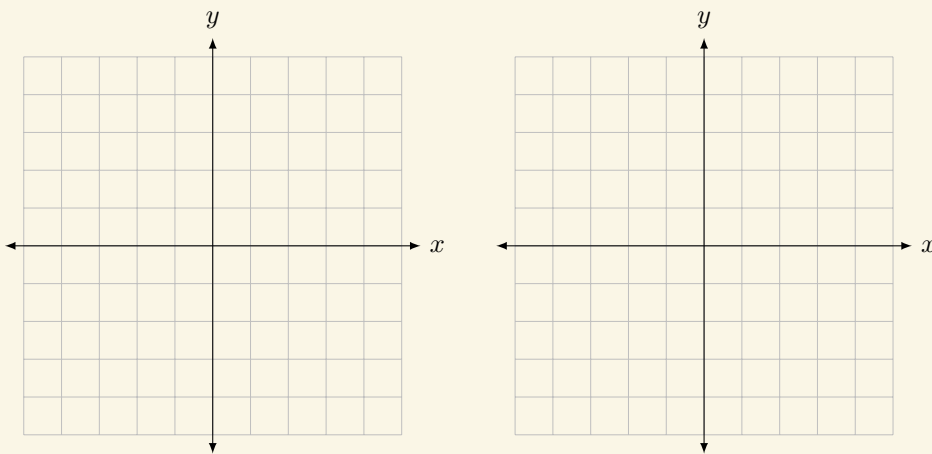
- 1 Determine four solutions of the equation $2x - 5y = 2$, including at least one solution with a negative value and one solution that uses decimals or fractions.

Whenever you write points as ordered pairs, you must write the parentheses. Don't be lazy!

- 2 Plot the point $(4, 2)$ and draw a visualization for both conceptualizations of locating that point.



- 3 Plot the point $(-3, -4)$ and draw a visualization for both conceptualizations of locating that point.

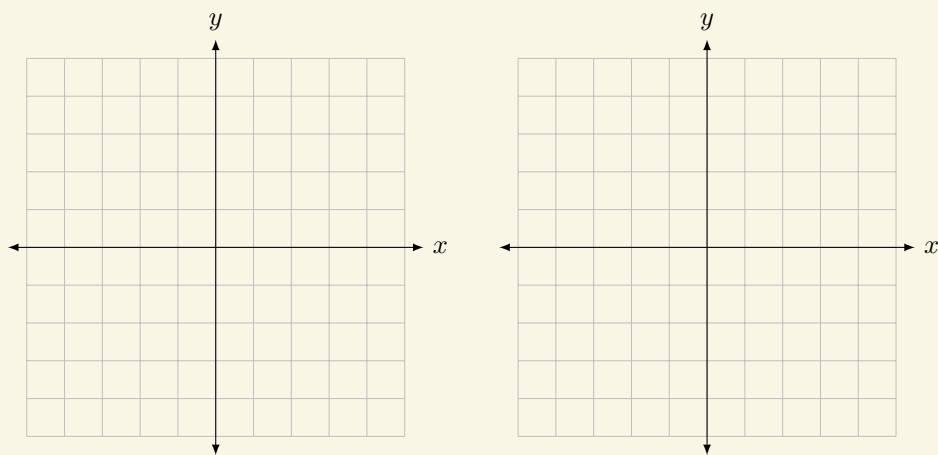


12.2 Lines and the Coordinate Plane - Worksheet 2

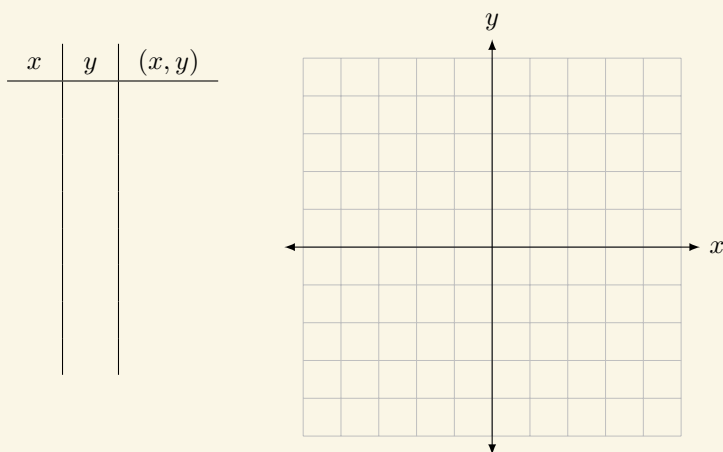
- 1 Determine 4 solutions of the equation $x - 3y = -2$, including at least one solution with a negative value and one solution that uses decimals or fractions.

- 2 Plot the point $(0, 3)$ and draw a visualization for both conceptualizations of locating that point.

Zeros throw students off for some reason.



- 3 Find four solutions of the equation $2x - 3y = 1$. Plot the points and sketch the solution.

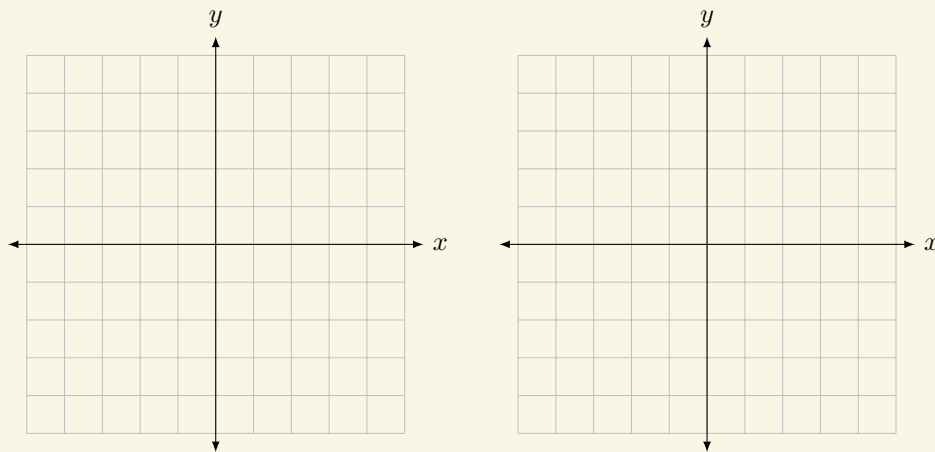


Try to pick points that fit on the given coordinate grid when plotting points. You will sometimes need to use off-grid points, but you should try to avoid that because the plots become increasingly inaccurate when you do.

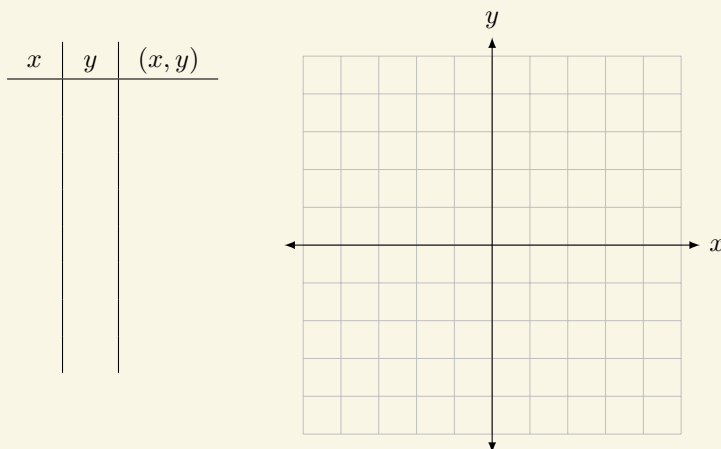
12.3 Lines and the Coordinate Plane - Worksheet 3

- 1 Determine 4 solutions of the equation $2x - 3y = -5$, including at least one solution with a negative value and one solution that uses decimals or fractions.

- 2 Plot the point $(-5, 0)$ and draw a visualization for both conceptualizations of locating that point.



- 3 Find four solutions of the equation $-x + y = 3$. Plot the points and sketch the solution.



12.4 Lines and the Coordinate Plane - Worksheet 4

1 Each chart represents some solutions of a linear equation, but the equation of that linear equation isn't given. Determine three more points on the line based on the existing solutions.

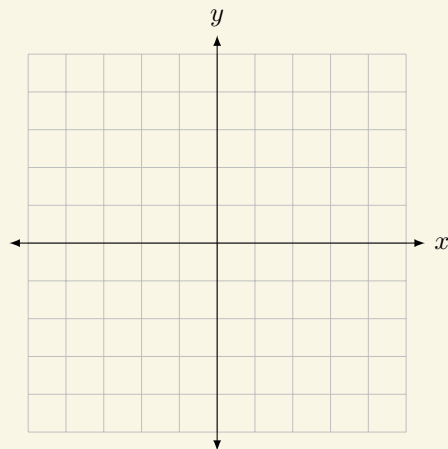
x	y	(x, y)
1	3	(1, 3)
2	1	(2, 1)
3	-1	(3, -1)

x	y	(x, y)
-4	5	(-4, 5)
-2	4	(-2, 4)
0	3	(0, 3)

This is something of a puzzle that is built on your experience. If you're really stuck, try sketching the graph and looking for a pattern.

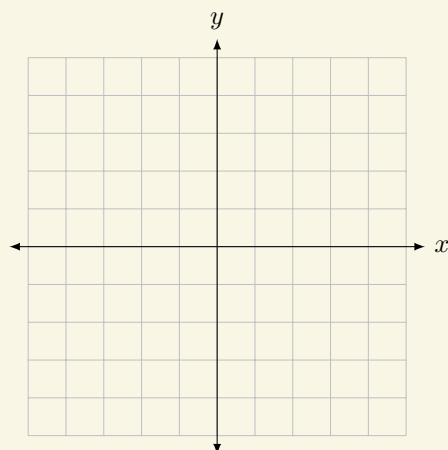
2 Find four solutions of the equation $-3x - y = 4$. Plot the points and sketch the solution.

x	y	(x, y)



3 Find four solutions of the equation $x = -3$. Plot the points and sketch the solution.

x	y	(x, y)



When there is no restriction on the y value, it means that you can pick the y -coordinate to be anything you want.

12.5 Lines and the Coordinate Plane - Worksheet 5

1 Each chart represents some solutions of a linear equation, but the equation of that linear equation isn't given. Determine three more points on the line between the given points.

x	y	(x, y)
-3	-2	$(-3, 2)$
4	5	$(4, 5)$

x	y	(x, y)
5	-3	$(5, -3)$
-5	2	$(-5, 2)$

2 Each chart represents some solutions of a linear equation, but the equation of that linear equation isn't given. Determine the missing coordinates based on the given points.

x	y	(x, y)
-3	4	$(-3, 4)$
-2	2	$(-2, 2)$
0		
	-4	
3		

x	y	(x, y)
5	3	$(5, 3)$
2	1	$(2, 1)$
-4		
	7	
11		

3 Find four solutions of the equation $4x - 3y = -3$. Plot the points and sketch the solution.

x	y	(x, y)

