

Graphing Points

When you are graphing points, it is important to remember that **x** is the distance **left-right** from origin (0, 0) –the center point on the coordinate plane–, while **y** is height **up-down** from the origin.

1. **Plot each point on the axes shown to the right.**
Then, label each point with its name (the given letter).

$A(0, 2)$

A moves 0 units left-right (stays at center), and +2 units up-down (+ is up)

$B(-3, 7)$

A moves -3 units left-right (- is left), and +7 units up-down (+ is up)

$C(0, -8)$

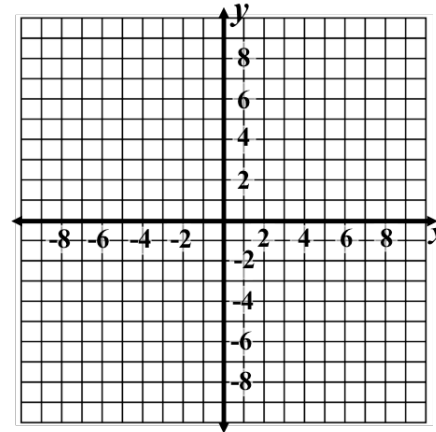
$D(6, 8)$

$E(5, 0)$

$F(-9, 0)$

$G(-4, -6)$

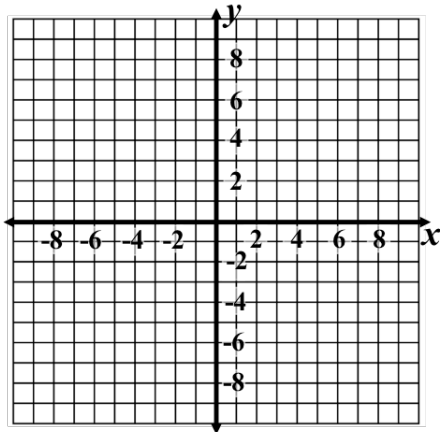
$H(4, -2)$



Graph each relation (set of x-y points) given below as a continuous function (connect the points with a line or a curve, and put arrows on each end of the line or curve to show that it continues forever in both directions).

2.

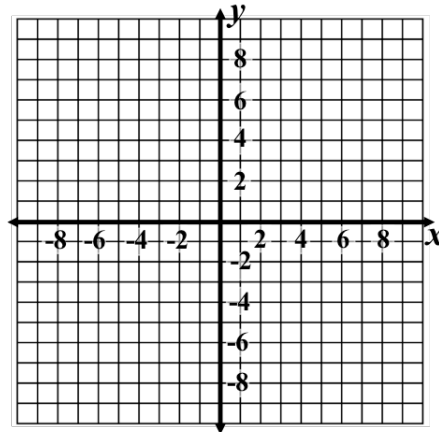
x	-9	-3	0	1	5
y	-5	1	4	5	9



Does the relation have a consistent slope? If yes, what is it?

3.

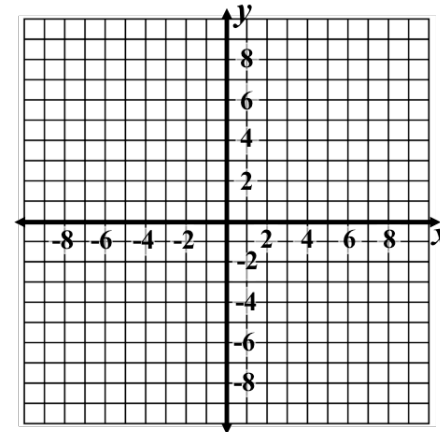
x	-4	-3	-2	-1	0
y	0	-3	-4	-3	0



Does the relation have a consistent slope? If yes, what is it?

4.

x	-7	-6	0	4	5
y	-8	-8	-8	-8	-8



Does the relation have a consistent slope? If yes, what is it?

For each equation, determine 5 points using the provided input values (x's). Then, graph each equation using those points.

5. $f(x) = 4$

If $x = -6$, then $y =$

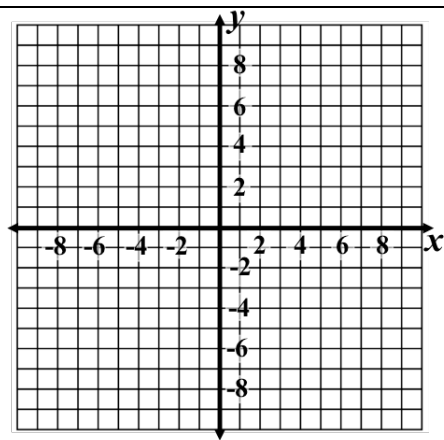
If $x = -3$, then $y =$

If $x = 0$, then $y =$

If $x = 3$, then $y =$

If $x = 6$, then $y =$

x	y
-6	
-3	
0	
3	
6	



6. $g(x) = x^2 - 2x - 3$

If $x = -1$, then $y =$

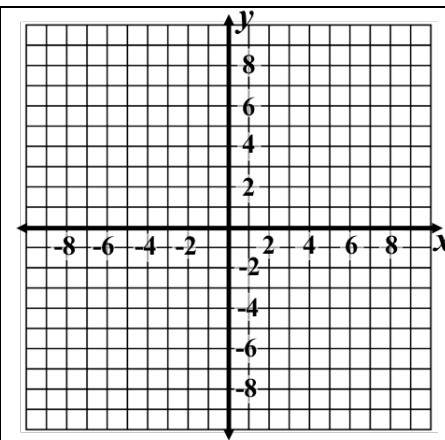
If $x = 0$, then $y =$

If $x = 1$, then $y =$

If $x = 2$, then $y =$

If $x = 3$, then $y =$

x	y
-1	
0	
1	
2	
3	



7. $h(x) = -4x - 3$

If $x = -3$, then $y =$

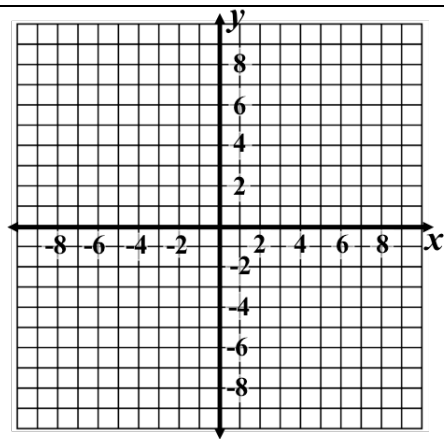
If $x = -2$, then $y =$

If $x = -1$, then $y =$

If $x = 0$, then $y =$

If $x = 1$, then $y =$

x	y
-3	
-2	
-1	
0	
1	



8. $j(x) = -2(x + 3)(x - 1)$

If $x = -3$, then $y =$

If $x = -2$, then $y =$

If $x = -1$, then $y =$

If $x = 0$, then $y =$

If $x = 1$, then $y =$

x	y
-3	
-2	
-1	
0	
1	

