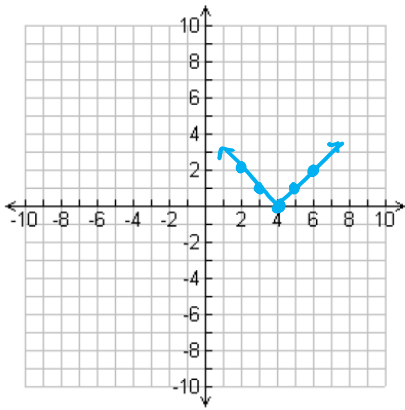


Unit 3 Day 34 - Graphing Absolute Value Equations Homework

(1-4) Graph the following using the table or calculator (if necessary). Then describe the transformation of the parent function.

1. $y = |x - 4|$

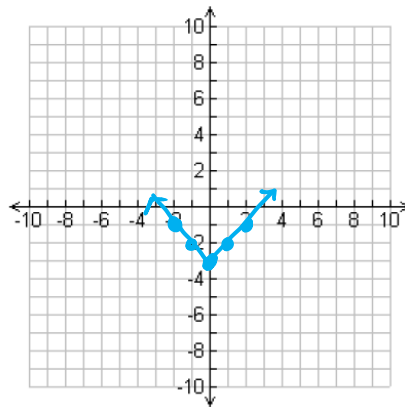


| x | y |
|---|---|
| 2 | 2 |
| 3 | 1 |
| 4 | 0 |
| 5 | 1 |
| 6 | 2 |

Transformation:

Right 4 units

2. $y = |x| - 3$

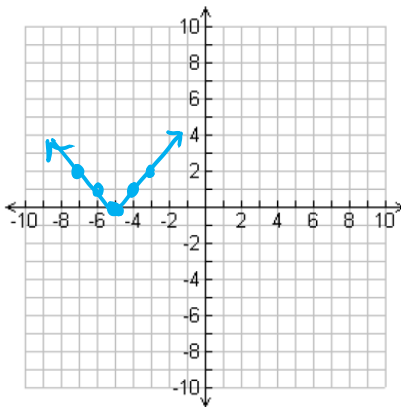


| x | y |
|----|----|
| -2 | -1 |
| -1 | -2 |
| 0 | -3 |
| 1 | -2 |
| 2 | -1 |

Transformation:

Down 3 units

3. $y = |x + 5|$

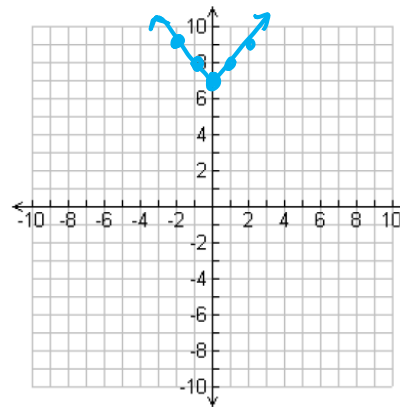


| x | y |
|----|---|
| -7 | 2 |
| -6 | 1 |
| -5 | 0 |
| -4 | 1 |
| -3 | 2 |

Transformation:

Left 5 units

4. $y = |x| + 7$



| x | y |
|----|---|
| -2 | 9 |
| -1 | 8 |
| 0 | 7 |
| 1 | 8 |
| 2 | 9 |

Transformation:

Up 7 units

Let's Review!!

5. Graph the linear function using INTERCEPTS method.

$$3x - 5y = -15$$

x int

$$3x = -15$$

$$x = -5$$

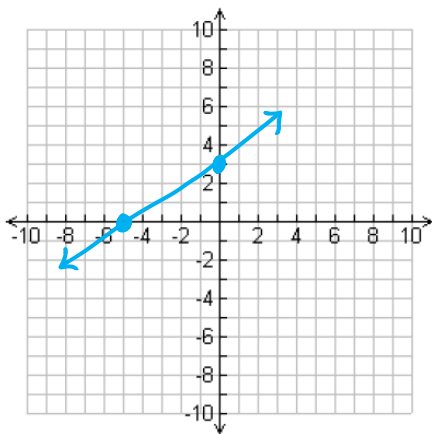
y int

$$-5y = -15$$

$$y = 3$$

x - intercept: (-5, 0)

y - intercept: (0, 3)



6. Graph using SLOPE-INTERCEPT method.

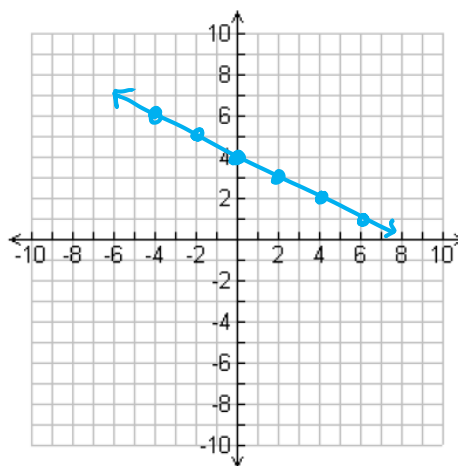
$$y = mx + b$$

$$\frac{-2y}{-2} = \frac{x-8}{-2} \frac{-2}{-2}$$

$$y = -\frac{1}{2}x + 4$$

Slope: $-\frac{1}{2}$

y - intercept: (0, 4)



Think Quick!

Two parallel lines have the same slope.

Perpendicular lines have opposite reciprocal slopes.

In order for a relation to be a function, every X must have

exactly one Y.