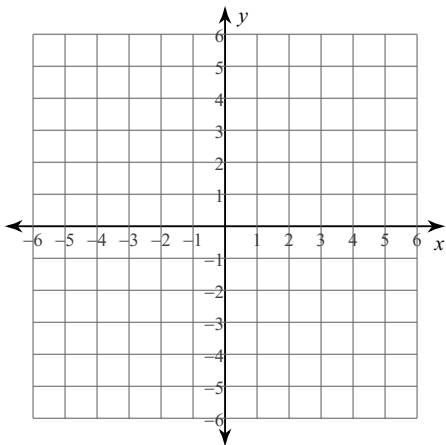


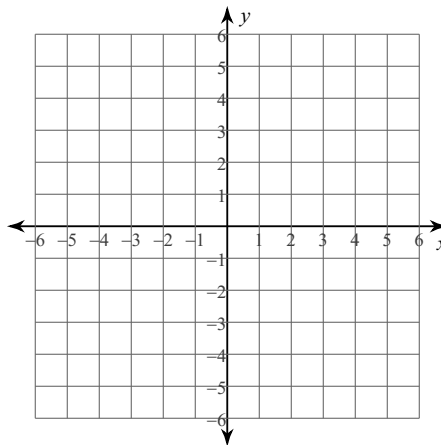
# Absolute Value Graphing - Transformations WS

Graph each equation.

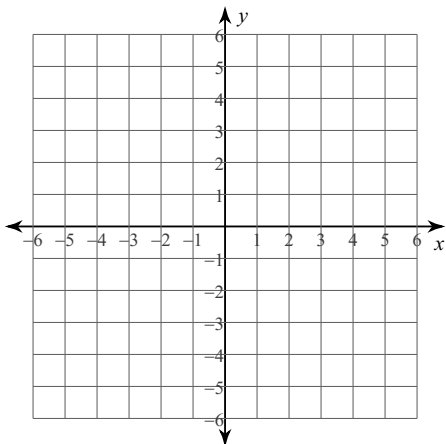
1)  $y = |x| - 1$



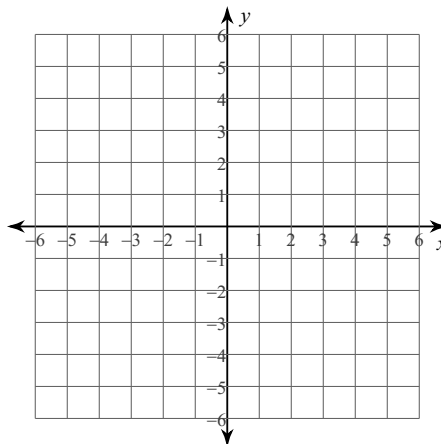
2)  $y = |x + 1| + 4$



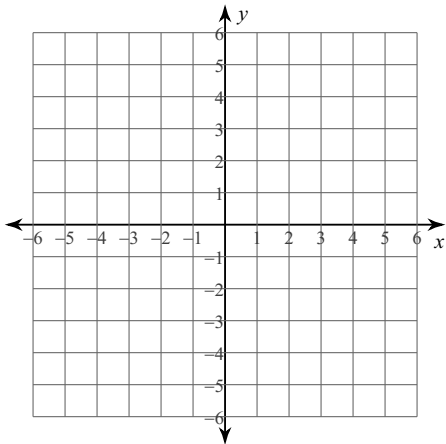
3)  $y = 2|x| - 2$



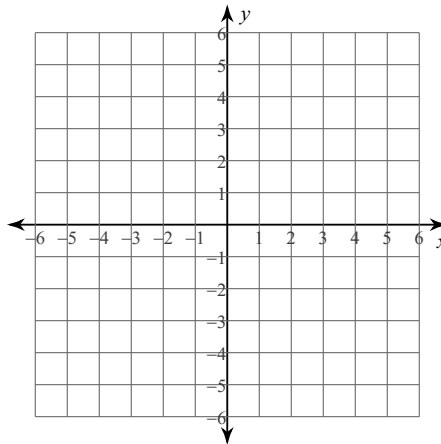
4)  $y = 3|x - 4| + 1$



5)  $y = -2|x - 2|$



6)  $y = -2|x - 2| - 1$



**Write an absolute value function to describe each transformation.**

7) vertex at (3, -5), opening down, stretched by a factor of 2.

8) vertex moved left 9, up 4, opening down, compressed by a factor of  $\frac{1}{2}$ .

9) vertex at (0, 3), opening up, compressed by a factor of your choice.

**Describe the transformation.**

10)  $y = -|x - 6| + 2$

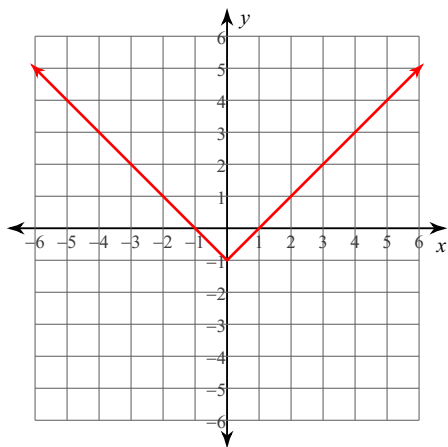
11)  $y = \frac{1}{2} \cdot |x + 2| - 1$

12)  $y = -4|x + 7| + 23$

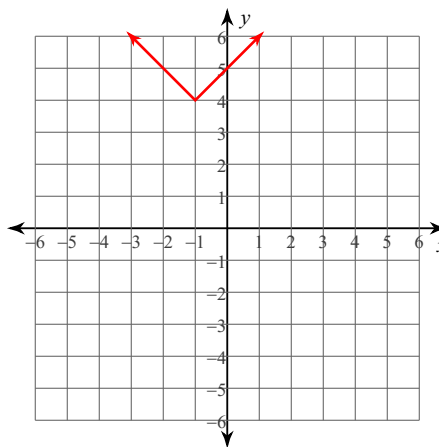
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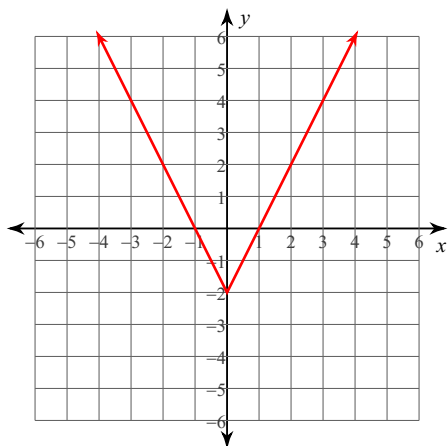
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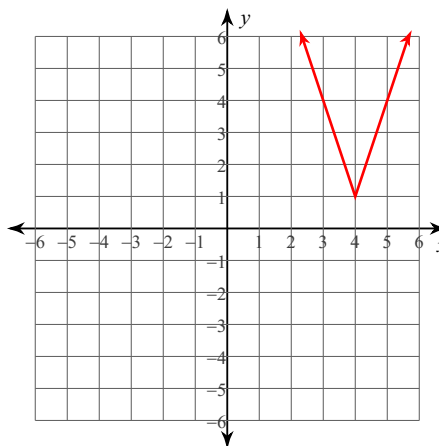
2)  $y = |x + 1| + 4$



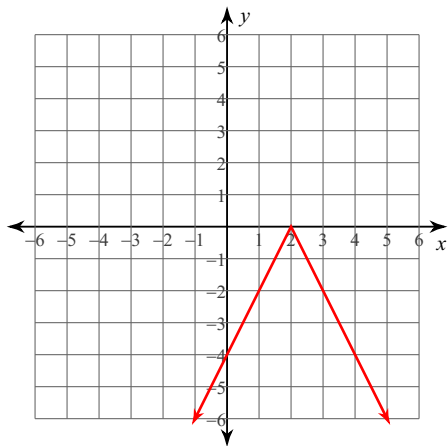
3)  $y = 2|x| - 2$



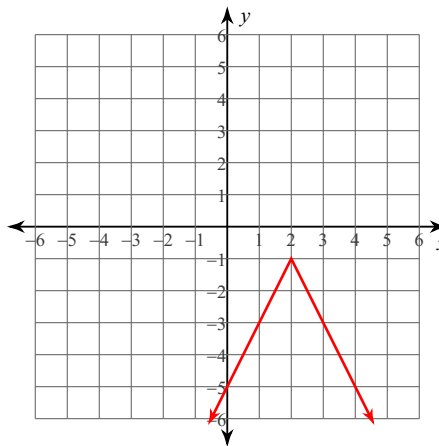
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The dot next to the choice indicates that it is the answer.

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