

The slide features a light beige background with a blue grid pattern in the top-left and bottom-right corners. A dark blue rectangular area is positioned on the left side, containing the text. A vertical red bar is located on the far left edge of the slide.

Algebra 1

Chapter 5
Section 5-8

Vocabulary

Parent
Function

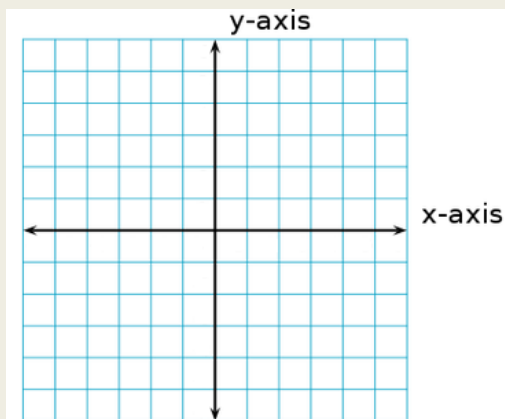
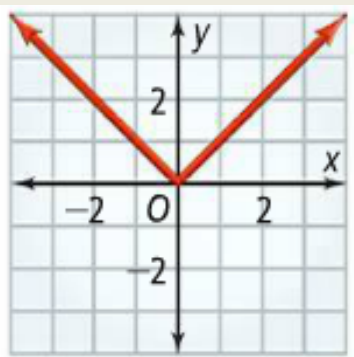
The most simplistic version of
a function family

Translation

Shift of a graph horizontally,
vertically or both

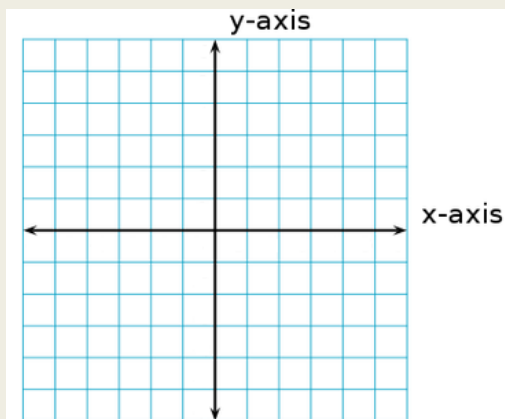
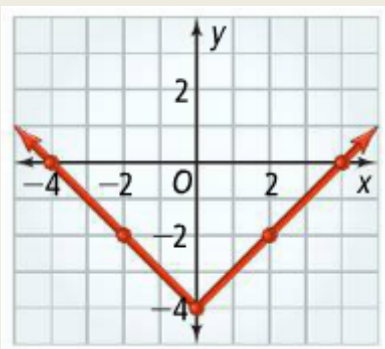
Graphing Absolute Values

Graph the function $y = |x|$



Graphing Absolute Values

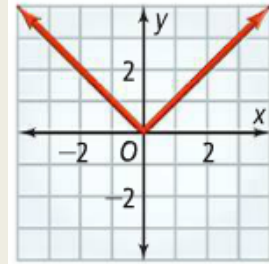
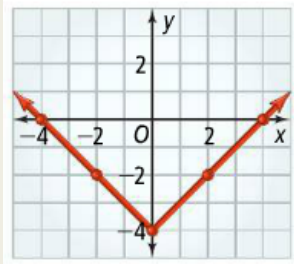
Graph the function $y = |x| - 4$



Vertical Translations

$y = |x|$ is a parent function

$y = |x| - 4$ is a translation of $y = |x|$

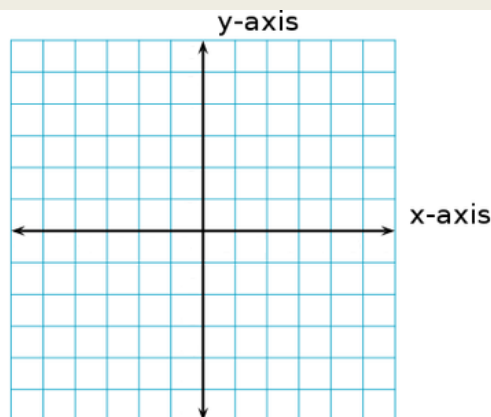
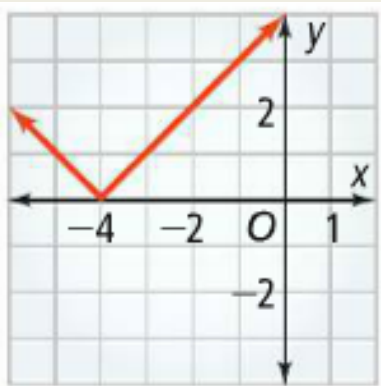


Describe the translation.

The translation moves the parent function ($y = |x|$) down by four.

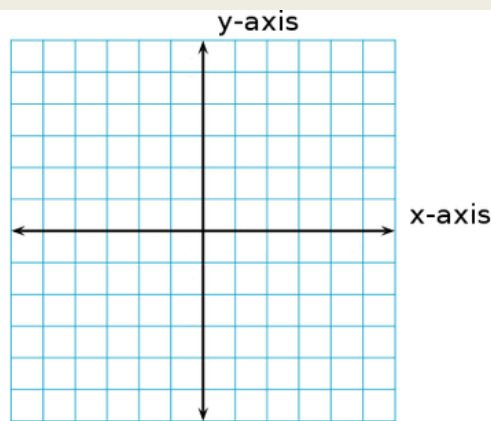
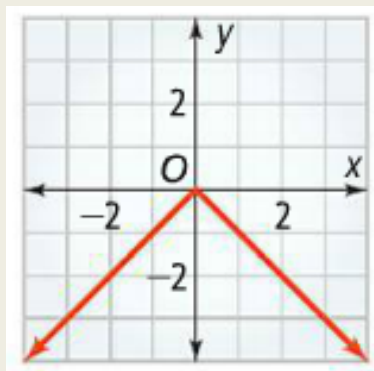
Horizontal Translations

Graph the function $y = |x + 4|$



Reflections

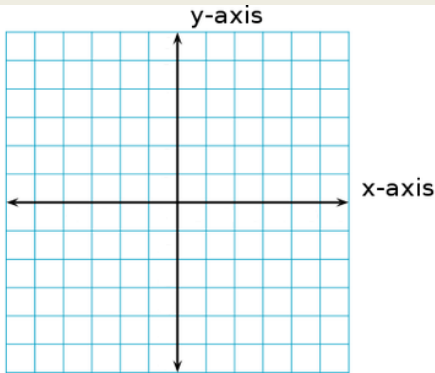
Graph the function $y = -|x|$



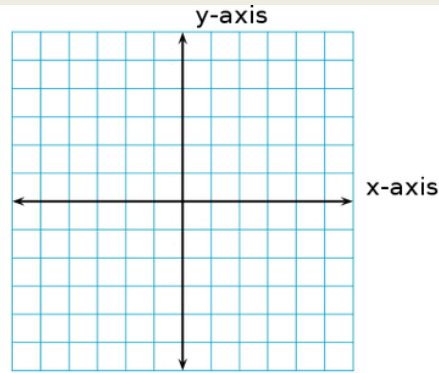
Graphing Translations

Graph, then describe the translations

$$y = |x - 2|$$



$$y = |x + 1|$$



The translation moves the parent function ($y = |x|$) to the right by two.

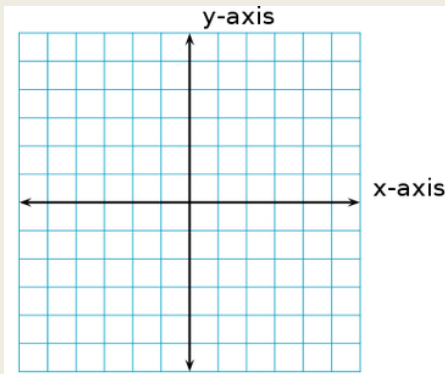
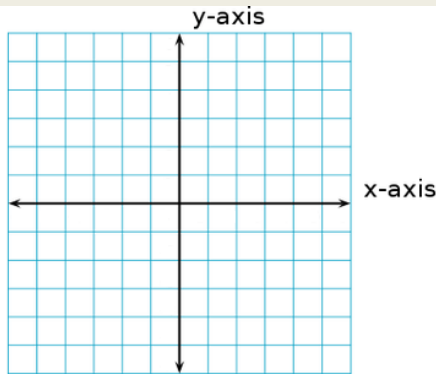
The translation moves the parent function ($y = |x|$) to the left by one.

Graphing Translations

Graph, then describe the translations

$$y = |x + 2| - 1$$

$$y = -|x|$$



The translation moves the parent function ($y = |x|$) to the left by two AND down by one. The translation reflects the parent function ($y = |x|$) upside-down.