SECONDARY MATH 3

**CORE STANDARDS**

F.IF.7b

F.IF.7e

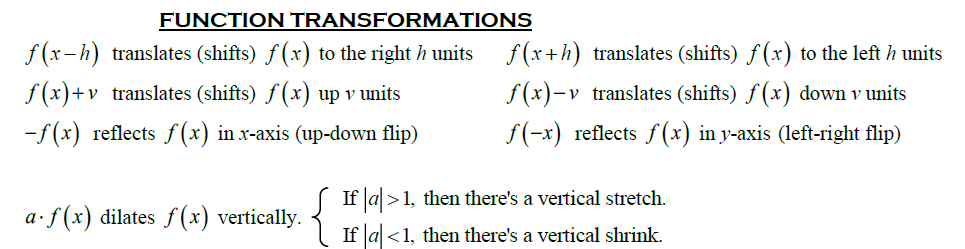
F.BF.3

LESSON

**7-3**

OBJECTIVE 1.I can graph parent functions of linear, quadratic, absolute value, cubic, square root, cube root, exponential, logarithmic, and trigonometric functions.

2. I can find function transformations.

NOTES

**Horizontal Shift:**

**Vertical Shift:**

**Reflections:**

; stretches function horizontally by a factor of .

; stretched function vertically by a factor of a.

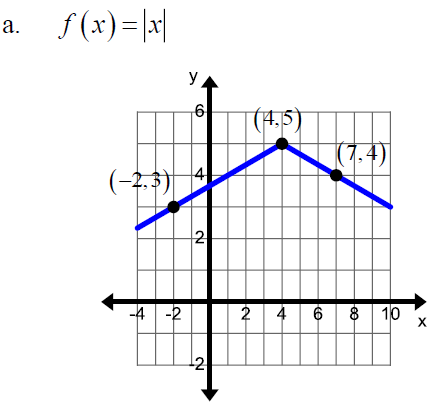
**Horizontal Stretch:**

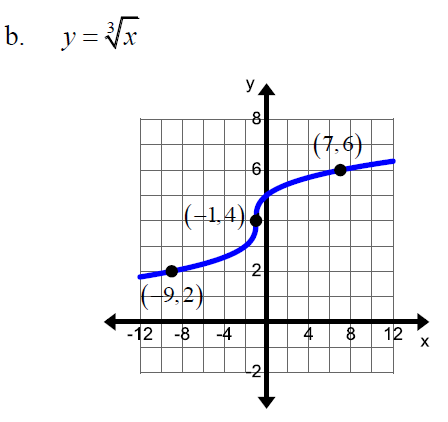
; stretches function vertically by a factor of a.

**Vertical Stretch:**

EXAMPLES



1. Given , graph each new function, without technology, and describe the effect of k on the original graph. Is the new function even odd or neither?
2. Determine the transformations that were used to change the given parent function to the function that is graphed, and write the equation of the transformed function.



PRACTICE **7-3** NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

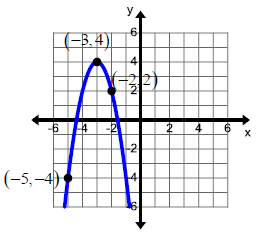
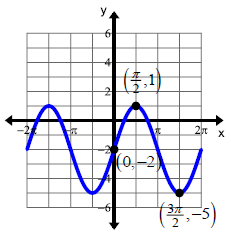
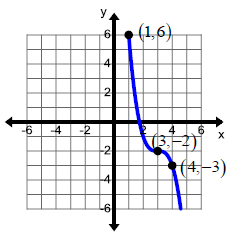
Given , graph each new function without technology, and describe the transformation on the original graph. Is new the function even odd or neither.

* 1. 
  2. 





* 1. 



Determine the transformations that were used to change the given parent function to the function that is graphed, and write the equation of the transformed function

5. 6. 7.