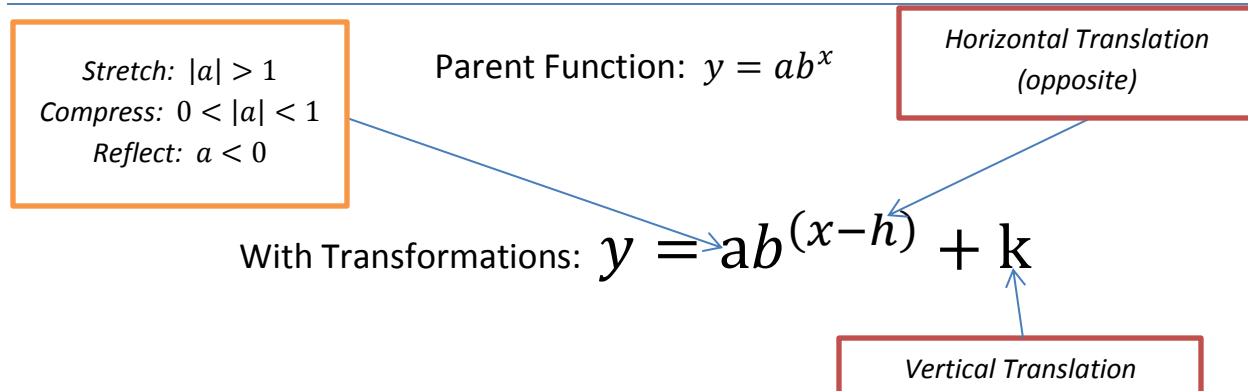


7-2 Properties of Exponential Functions Notes Name: _____



Write the parent function of each function.

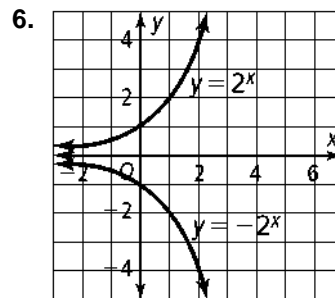
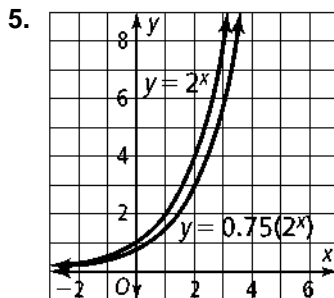
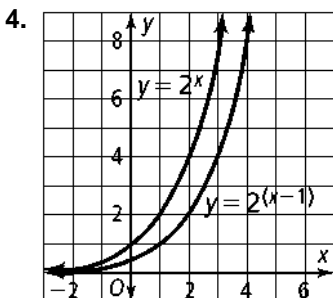
1. $y = 5 \cdot 3^x$

2. $y = 7^{(x-3)}$

3. $y = 6^{(x-2)} + 9$

$y = 3^x$

Identify each function as a compression, a reflection, or a translation of the parent function.



Write a function for the indicated transformation. (Check each with a graphing calculator.)

7. the function $y = 5^{(x-2)}$ vertically stretched by the factor 3

8. the function $y = 7 \cdot 2^x$ translated up 8 units

9. the function $y = 6^x$ translated left 5 units

10. the function $y = 3^x$ reflected across the x -axis.