

**Learning Goal**

- ◆ Reflect a function horizontally and vertically.

Notes

A reflection _____

The reflection is a _____ of the original graph.

	Horizontal Reflection	Vertical Reflection
Equation		
Table		
Graph		

Let's Practice!

Write the equation for the horizontal and vertical reflection of each function.

1. $f(x) = 5^x$

Horizontal reflection: _____

Vertical reflection: _____

2. $f(x) = -2x^2$

Horizontal reflection: _____

Vertical reflection: _____

3. $f(x) = \frac{5}{4}x^3$

Horizontal reflection: _____

Vertical reflection: _____

Let's Reflect an Exponential Function!

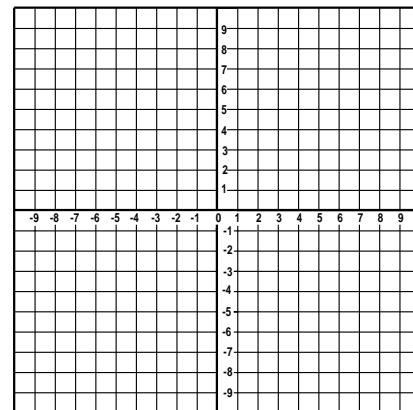
Equation

$$f(x) = 2^x$$

Table

x	$f(x) = 2^x$
-3	$2^{-3} =$
-1	$2^{-1} =$
0	$2^0 =$
1	$2^1 =$
3	$2^3 =$

Graph



	Equation	Table	Graph														
Horizontal Reflection	$2^x \rightarrow \underline{\hspace{2cm}}$	<table border="1"> <thead> <tr> <th>x</th> <th>$f(x) = \underline{\hspace{2cm}}$</th> </tr> </thead> <tbody> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </tbody> </table>	x	$f(x) = \underline{\hspace{2cm}}$													
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