1.2 HW Questions

Sep 18-3:12 PM

1.6 Graphical Transformations

Objectives: 4) I can graph parent functions.

5) I can describe transformations of a function.

6) I can graph functions using transformations.

Sep 14-1:41 PM

Parent Functions Sheet

Sep 18-3:49 PM

Transformations

Domain changes
Range changes

$$y = \pm a\left(\pm\frac{1}{b}(x-h)\right)+k$$

	Vertical (Range)	Horizontal (Domain)
Translation (Shift)		
Stretch/Compress		
Reflection (Flip)		

Oct 10-9:19 AM

Information to remember about transformations....

x's lie

any change to the domain (x's) is opposite of what appears in the equation

Why?

$$y = a\left(\frac{1}{b}(x-h)\right)+k$$

Oct 10-9:22 AM

Identify the transformations for the given functions.

$f(x)=\sqrt{x}-2$

$f(x)=\sqrt{x+3}$

$f(x)=2\sqrt{x}$

$f(x)=\frac{1}{3}\sqrt{x}$

$f(x)=-\sqrt{x}$

$f(x)=\sqrt{\frac{1}{4}x}$

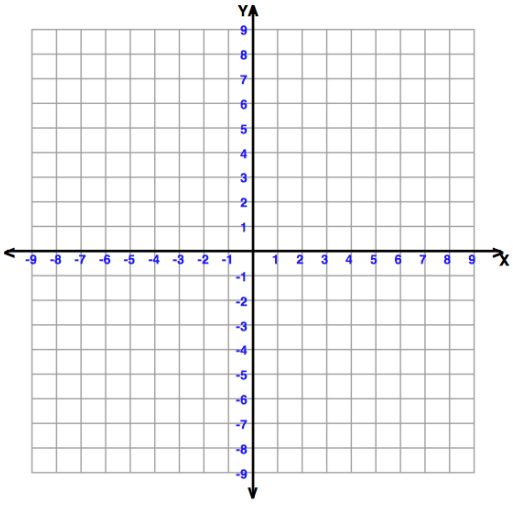
$f(x)=3\sqrt{\frac{1}{2}(x+1)}-5$

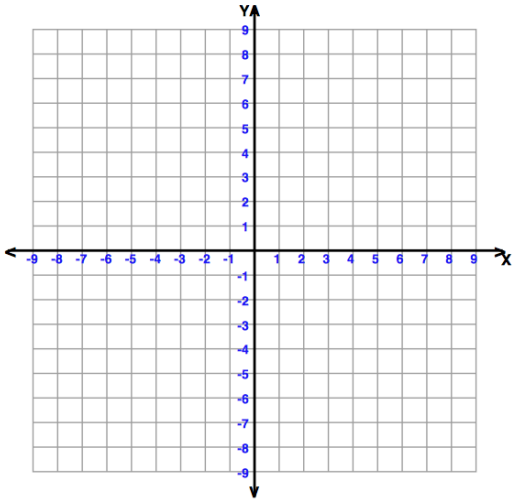
Oct 10-9:25 AM

State the parent function and identify the transformations and graph

$$y = 2\sqrt{x+3}$$

$$y = -(x-2)^2 + 1$$



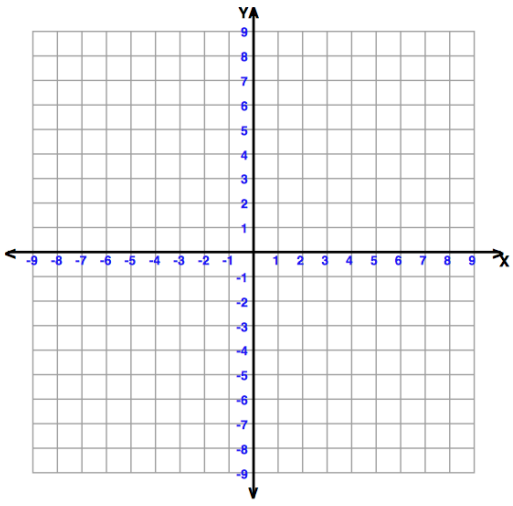


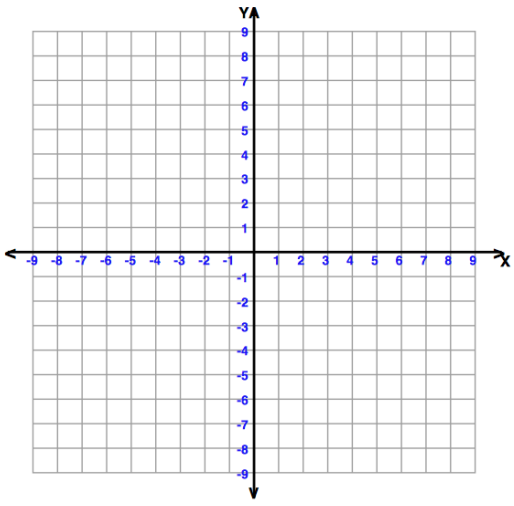
Oct 10-9:41 AM

State the parent function and identify the transformations and graph

$$f(x) = \left(\frac{1}{2}(x-1)\right)^3$$

$$y = 3|x| + 2$$





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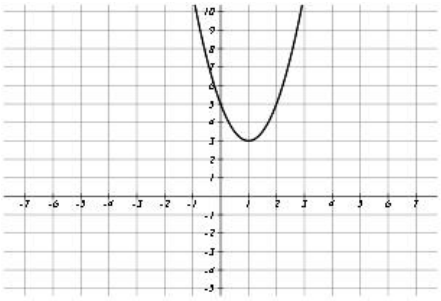
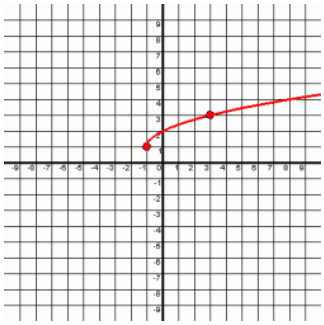
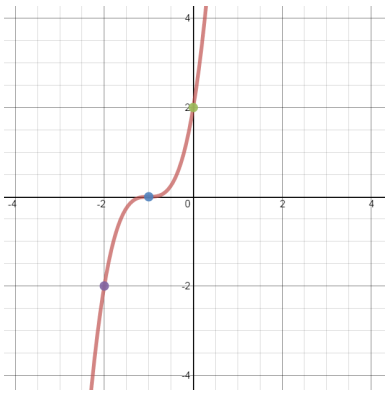
Write the equation for the function.







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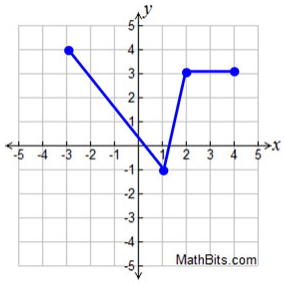
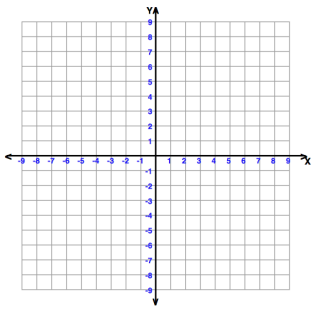
With your group of 4...





Sketch the graph of $y = 2 + 2f(x - 1)$

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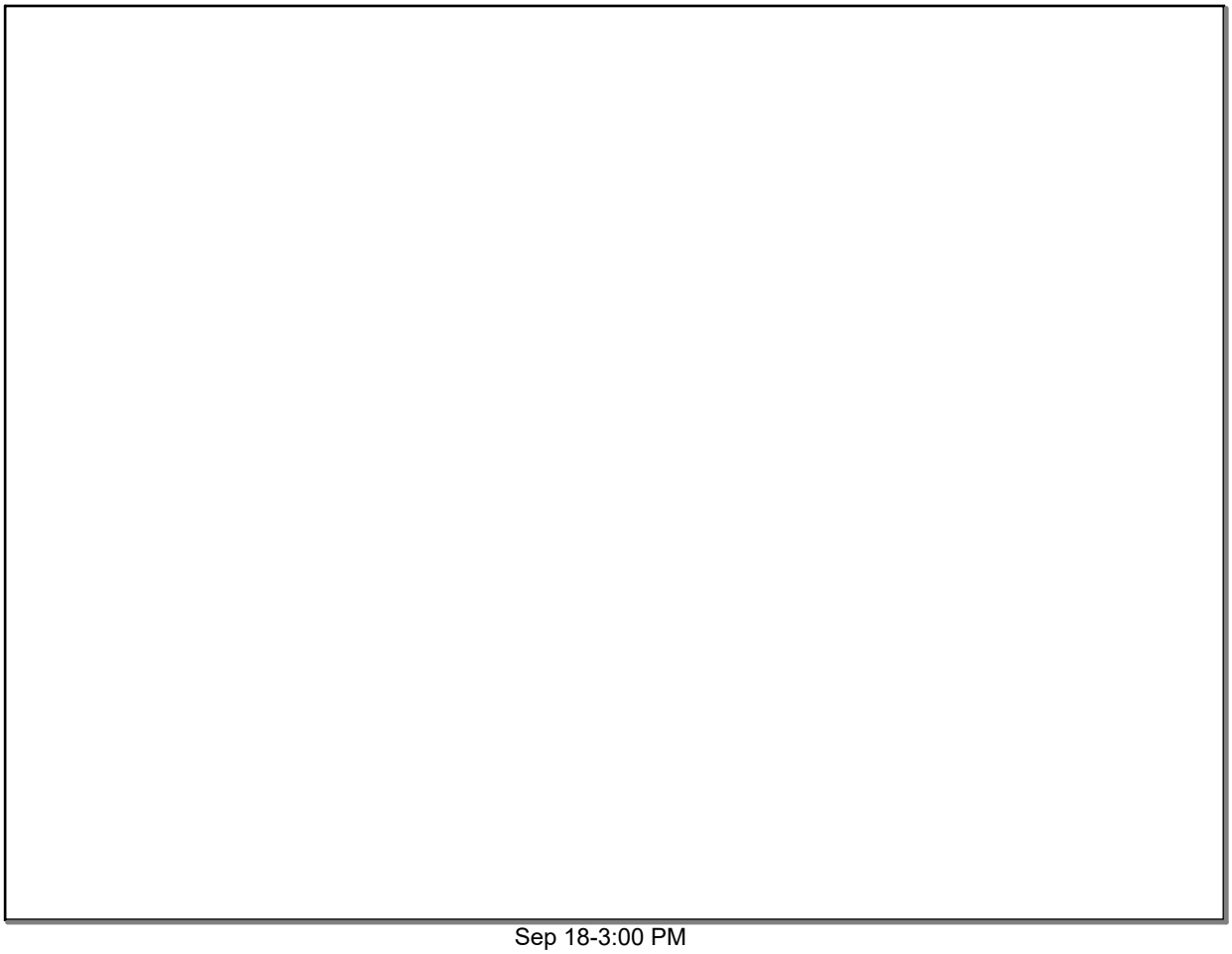

Sep 18-3:00 PM