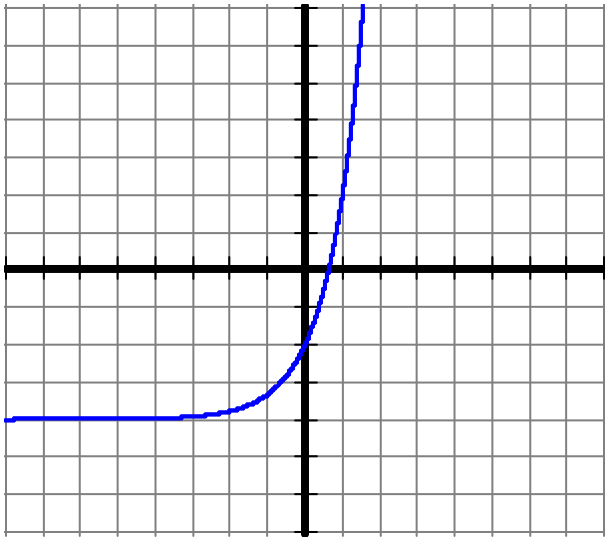


Homework 15 ANSWERS – Graphs of Combined Transformations  
Precalculus – Mr. Oberle

FROM THE BOOK: p 143/5, 8, 13, 15

1.  $y = 2 \cdot 3^x - 4$

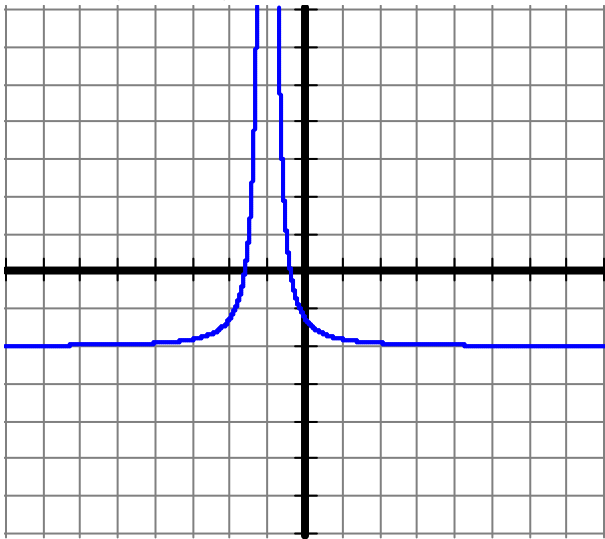


Domain:  $\mathbb{R}$

Range:  $y > -4$

Asymptotes:  $y = -4$

2.  $y = \frac{3}{(2(x+1))^2} - 2$

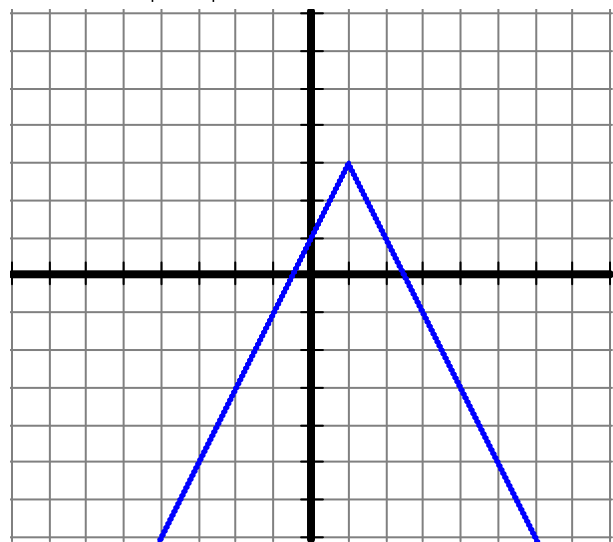


Domain:  $x \neq -1$

Range:  $y > -2$

Asymptotes:  $y = -2$

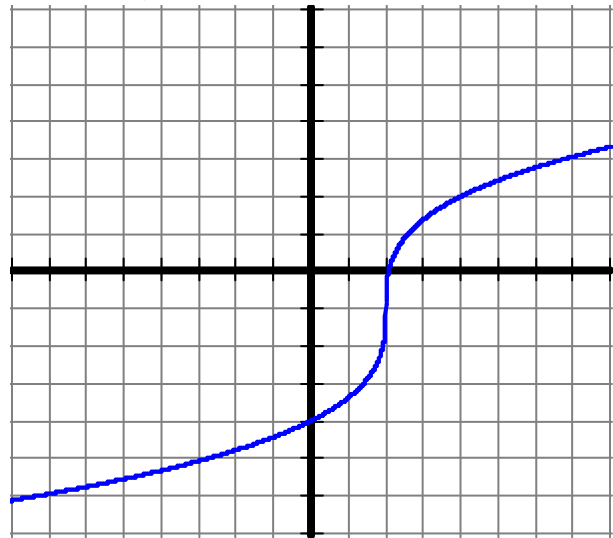
3.  $y = -2|x-1| + 3$



Domain:  $\mathbb{R}$

Range:  $y \leq 3$

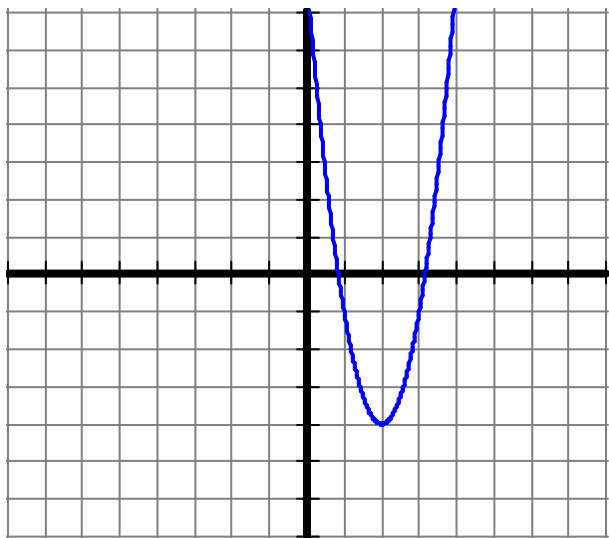
4.  $y = 3\sqrt[3]{\frac{1}{2}(x-2)} - 1$



Domain:  $\mathbb{R}$

Range:  $\mathbb{R}$

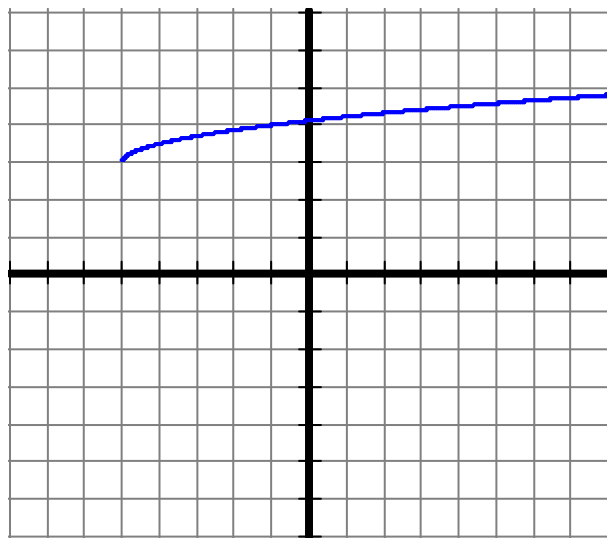
Write the formula for each of the following graphs. Describe the domain and range of the function.



5.  $y = 3(x-2)^2 - 4$

Domain:  $\mathbb{R}$

Range:  $y \geq -4$



6.  $y = \sqrt{\frac{1}{4}(x+5)} + 3$

Domain:  $x \geq -5$

Range:  $y \geq 3$