

The general form of an Absolute Value Function is:

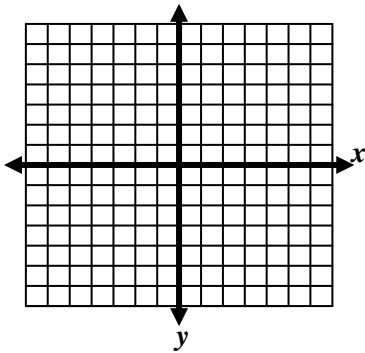
Let $g(x)$ be the indicated transformation(s) of $f(x) =  x $ . Write the rule for $g(x)$ .		
Vertical compression by a factor of $\frac{1}{2}$	Horizontal translation to the right 3 and vertical translation up 5.	Reflection in the $x$ -axis, horizontal translation to the left 4, and vertical translation up 1.

Using the graph of  $f(x) = |x|$  as a guide, describe the transformations of each function and identify its domain and range. Then, graph each function.

1.  $f(x) = \frac{2}{5}|x|$

Transformations:

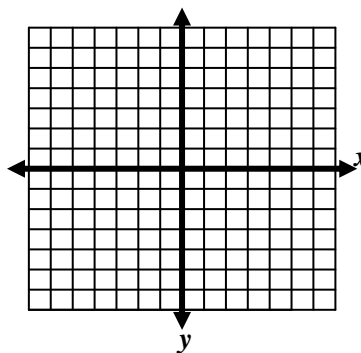
D:            R:



2.  $f(x) = 2|x - 5| + 2$

Transformations:

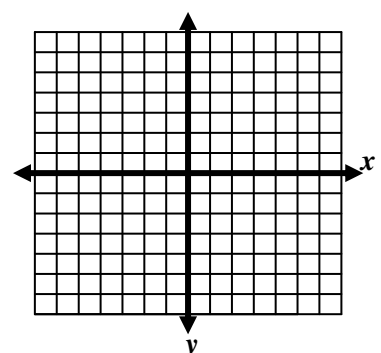
D:            R:



3.  $f(x) = -\frac{2}{3}|x| - 3$

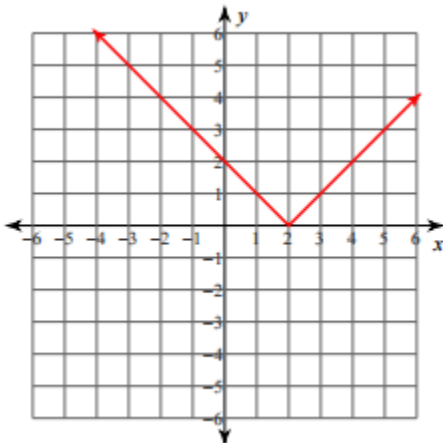
Transformations:

D:            R:



Write the equation of the absolute value function.

4.



5.

