

**Advanced Precalculus**  
**Function Transformations**

**Name:** \_\_\_\_\_

1.)  $y = -3f(2x - 5) + 2$

Describe it:

If (6,4) is a point on  $y = f(x)$ ,  
what point is on the transformed function?

2.)  $y = -\frac{1}{2}f(4 - 3x) + 5$

Describe it:

If (10,-3) is a point on  $y = f(x)$ ,  
what point is on the transformed function?

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

Describe it:

If (-4,5) is a point on  $y = f(x)$ ,  
what point is on the transformed function?

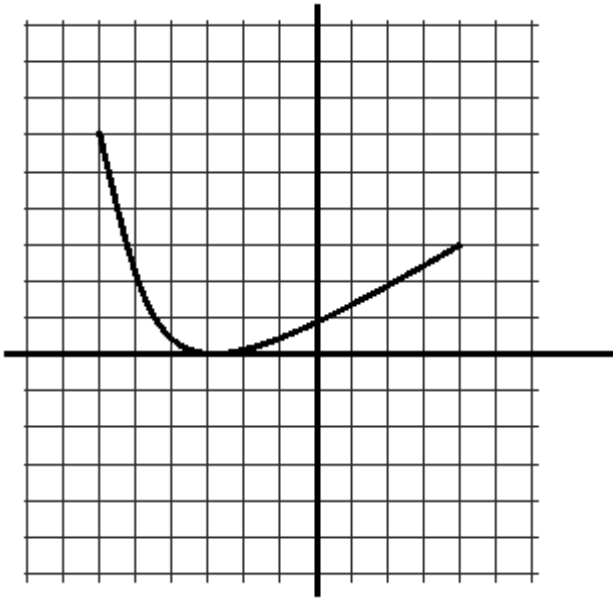
4.)  $y = \frac{1}{3}f\left(\frac{5}{2} - 3x\right) - 3$

Describe it:

If (-8,-2) is a point on  $y = f(x)$ ,  
what point is on the transformed function?

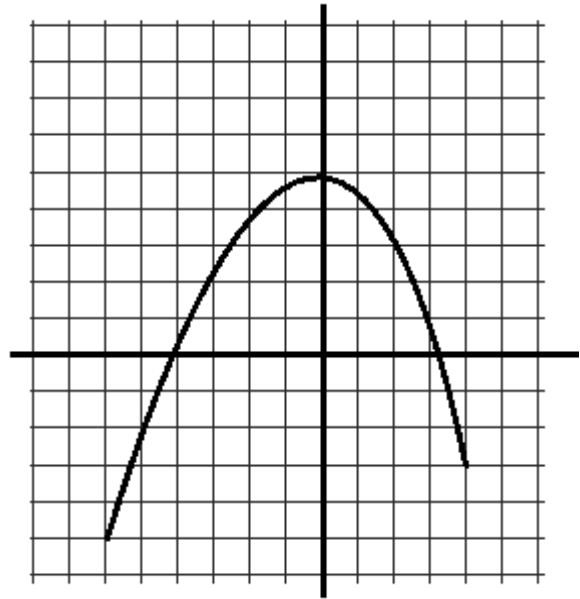
- 5.) Given the graph of  $y = f(x)$ ,  
draw the graph of

$$y = -f(2x) + 4$$



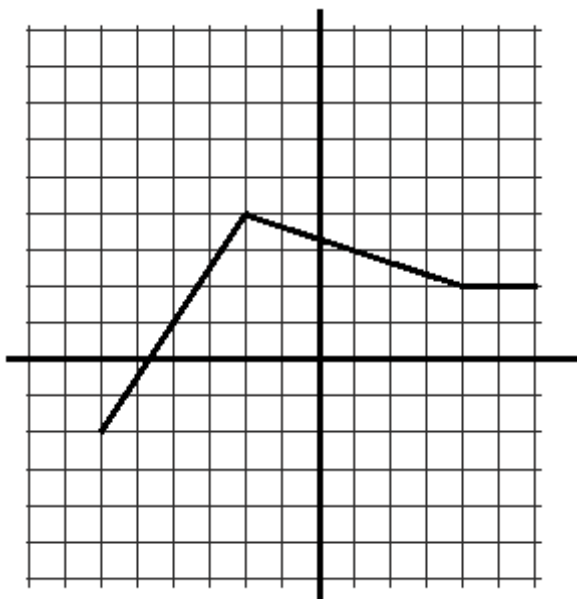
- 6.) Given the graph of  $y = f(x)$ ,  
draw the graph of

$$y = \frac{1}{2}f(x+2) + 4$$



- 7.) Given the graph of  $y = f(x)$ ,  
draw the graph of

$$y = -f(6-2x) + 1$$



- 8.) Given the graph of  $y = f(x)$ ,  
draw the graph of

$$y = -\frac{1}{2}f(x+1) - 1$$

