



Round 5

Suppose $(6,1)$ is the point of the graph of $y = f(x)$. For each of the following, name a point on the graph then name the transformation.

1. $y = f(3x)$

 $(2, 1)$ H. Compress

2. $y = f(x+2)$

 $(4, 1)$ H. translation

3. $y = f(x)+5$

 $(6, 6)$ Vert trans.

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

 $(6, \frac{1}{2})$ Vert. Compress

5. $y = f(-x)$

 $(-6, 1)$ Y-axis reflect

6. $y = f(x-7)$

 $(13, 1)$ V. trans

7. $y = 4f(x)$

 $(6, 4)$ V. Stretch

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

 $(12, 1)$ H. Stretch

9. $y = -f(x)$

 $(6, -1)$ X-axis reflect