

# Transformations

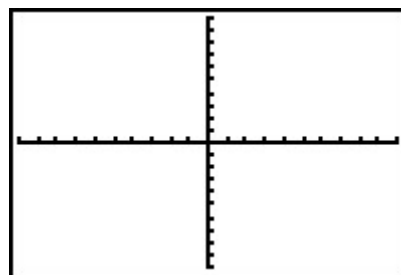


**Directions:** Graph these equations on the same set of axes. Describe the type of transformation which occurs by moving graph  $Y_1$  onto graph  $Y_2$ .

1.  $Y_1 = x^2$

$Y_2 = x^2 + 5$

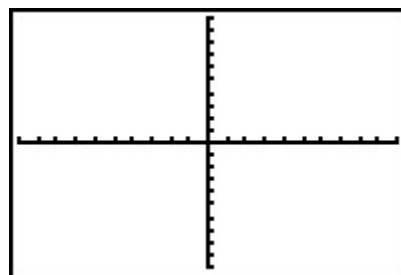
Transformation? \_\_\_\_\_



2.  $Y_1 = x^2 + 5$

$Y_2 = 5 - x^2$

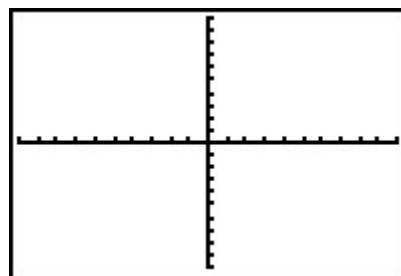
Transformation? \_\_\_\_\_



3.  $Y_1 = x^2$

$Y_2 = (x - 5)^2$

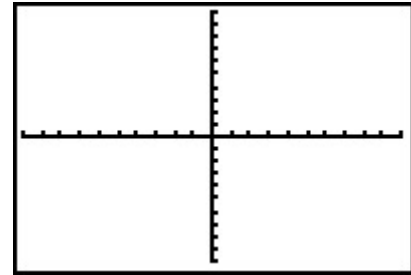
Transformation? \_\_\_\_\_



4.  $Y_1 = \sqrt{x}$

$Y_2 = \sqrt{x} + 4$

Transformation? \_\_\_\_\_



5.  $Y_1 = \sin(x)$

$Y_2 = 4 \sin(x)$

Transformation? \_\_\_\_\_

