

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Match the columns. Write the letters on the lines.

Identify the type of translation of  $f(x) = x^2$ .

- |                             |                            |
|-----------------------------|----------------------------|
| 1. _____ $g(x) = x^2 - 6$   | a. Translate 6 units left  |
| 2. _____ $g(x) = x^2 + 6$   | b. Translate 6 units down  |
| 3. _____ $g(x) = (x + 6)^2$ | c. Translate 6 units right |
| 4. _____ $g(x) = (x - 6)^2$ | d. Translate 6 units up    |



Name: \_\_\_\_\_ Date: \_\_\_\_\_

Match the columns. Write the letters on the lines.

Identify the type of transformation of  $f(x) = x^2$ .

- |                                   |  |
|-----------------------------------|--|
| 1. _____ $g(x) = \frac{1}{3}x^2$  | a. Vertical stretch by a factor of 3   |
| 2. _____ $g(x) = 3x^2$            | b. Reflection across the $x$ -axis   |
| 3. _____ $g(x) = -x^2$            | c. Vertical Compression by a factor of $\frac{1}{3}$ , reflected across the $x$ -axis. |
| 4. _____ $g(x) = -\frac{1}{3}x^2$ | d. Vertical Compression by a factor of $\frac{1}{3}$ .                                 |

