

**Day 122**

Use the word *reflection*, *translation*, or *dilation* to make each of the following statements true.

1. The graph of the function  $h(x) = -|x|$  is a \_\_\_\_\_ of the graph of the function  $f(x) = |x|$  over the  $x$  - axis.
2. The graph of the function  $j(x) = 2|x|$  is a \_\_\_\_\_ of the graph of the function  $f(x) = |x|$ .
3. The graph of the function  $k(x) = |x + 1|$  is a \_\_\_\_\_ of the graph of the function  $f(x) = |x|$ .

Explain what you must do to the graph of  $f(x) = |x|$  to produce each graph of  $g$ .

4.  $g(x) = |x| + 4$ : \_\_\_\_\_
5.  $g(x) = |x + 2|$ : \_\_\_\_\_
6.  $g(x) = |x - 5| - 6$ : \_\_\_\_\_

**Answer Key**

**Day 122**

- 1) Reflection
- 2) Dilation
- 3) Translation
- 4) Translate up 4 units
- 5) Translate left 2 units
- 6) Translate right 5 units and  
down 6 units