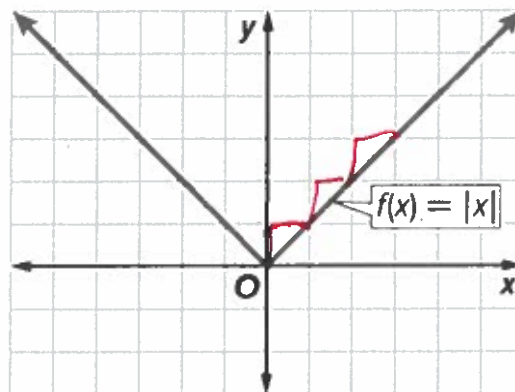


## Absolute Value Functions (Part 1)

**Parent Function:**  $f(x) = |x|$

**Translated Function:**  $g(x) = a|x - h| + k$



1. Describe the translation in  $g(x) = |x| - 3$  as it relates to the graph of the parent function.

*Down 3*

2. Describe the translation in  $g(x) = |x| + 2$  as it relates to the graph of the parent function.

*Up 2*

3. Describe the translation in  $g(x) = |x - 4|$  as it relates to the graph of the parent function.

*Right 4*

4. Describe the translation in  $g(x) = |x + 5|$  as it relates to the graph of the parent function.

*Left 5*

5. Describe the translation in  $g(x) = |x + 2| - 3$  as it relates to the graph of the parent function.

*Left 2*

*Down 3*

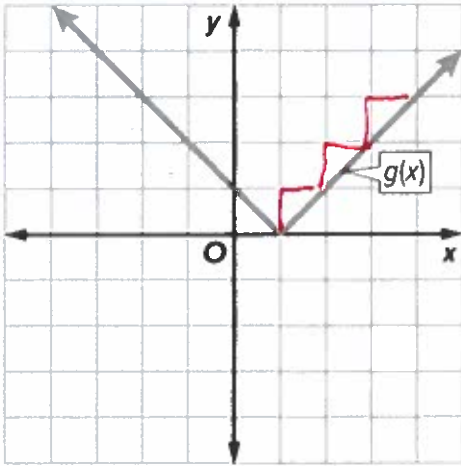
6. Describe the translation in  $g(x) = |x - 1| + 7$  as it relates to the graph of the parent function.

*Right 1*

*up 7*

## Absolute Value Functions (Part 1)

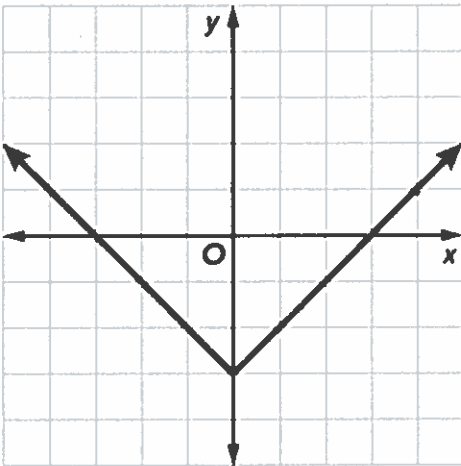
7. Write the equation of the function from its graph in relation to the parent function.



Right 1 (h)

$$g(x) = |x - 1|$$

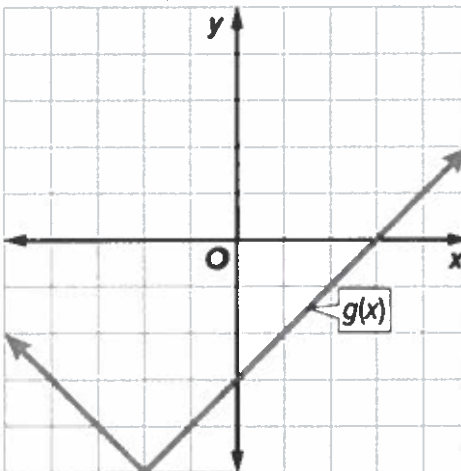
8. Write the equation of the function from its graph in relation to the parent function.



Down 3 (k)

$$g(x) = |x| - 3$$

9. Write the equation of the function from its graph in relation to the parent function.



Left 2  
Down 5

$$g(x) = |x + 2| - 5$$