

Unit 7 Review – Transformations

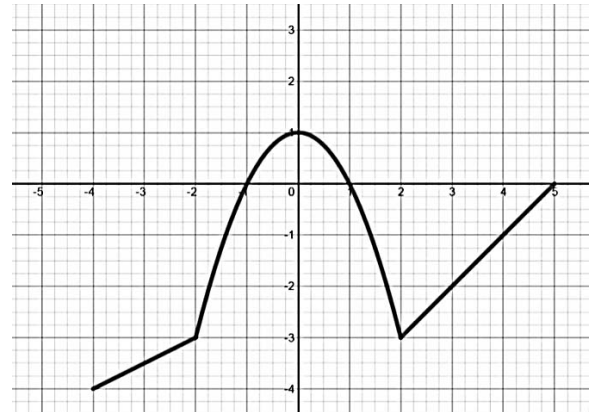
Name _____ Per _____

Describe the transformation in words.

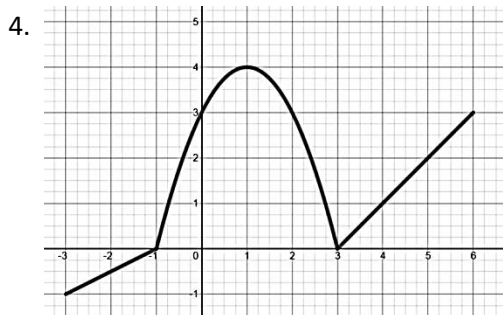
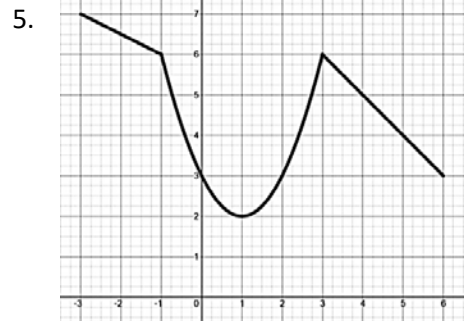
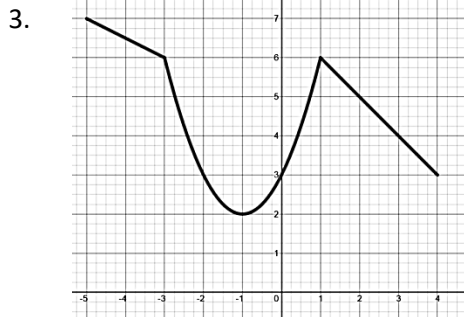
1. $f(x) = -|x+3|+5$

2. $h(x) = 2g(x-3)+7$

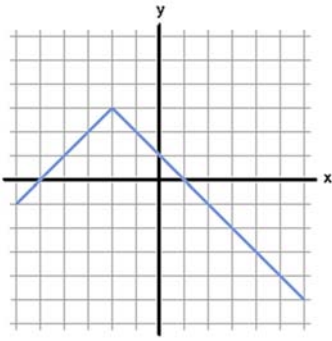
The graph of $f(x)$ is given to the right. Use it to match each of the transformations to the appropriate equation below. One equation will not be used. Justify each answer.



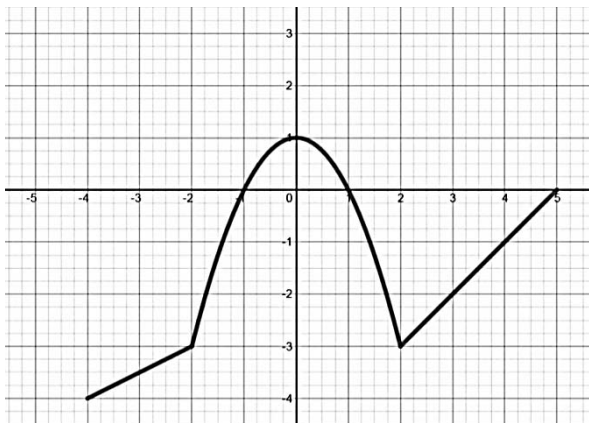
$g(x) = f(x-1)+3$	$h(x) = -f(x+1)+3$
$j(x) = f(x+1)-3$	$k(x) = -f(x-1)+3$



6. Write the equation for the absolute value graph. Also state the domain and range.

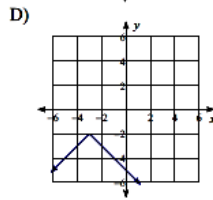
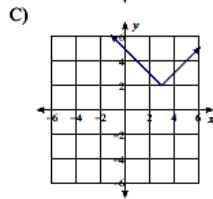
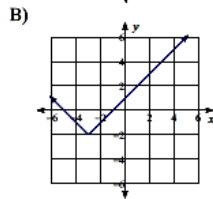
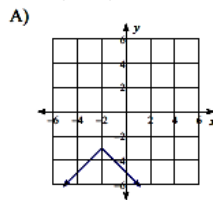


7. For the function, $f(x)$, below, draw the image under the following transformation: down 5, left 1, and reflect over the x -axis. Then write $g(x)$ with the transformation notation that describes these changes.

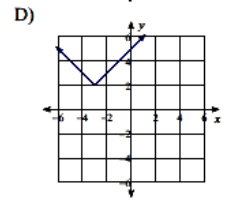
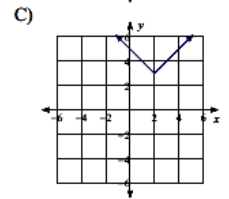
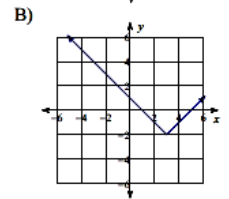
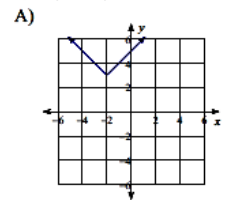


8. Match each absolute value equation to its appropriate graph.

1) $y = -|x + 2| - 3$



2) $y = |x + 3| + 2$



Selected Answers

1. Reflect across x -axis Shift left 3 Shift up 5	2. Vertical stretch by 2 Shift right 3 Shift up 7	3. It is $h(x)$ since the graph is reflected on the x -axis and shifted left 1 and up 3.
6. $f(x) = - x + 2 + 3$ Domain: $(-\infty, \infty)$ Range: $(-\infty, 3]$	7. $g(x) = -f(x + 1) - 5$	8. 1. A