mobius

Function Transformations (Domain/Range) - Double Transformation (Values) to Transformed Domain/Range

1 If the domain of f(x) is [a,b], what is the domain of g(x)?

$$g(x) = f(4x - 2)$$

A	$[\frac{a}{4}, \frac{b}{4}]$	B	$[\frac{a+2}{4}, \frac{b+2}{4}]$
C	$[a+2, b+2]$		

2 If the domain of f(x) is [a,b], what is the domain of g(x)?

$$g(x) = -f(x - 5)$$

A	$[-5-b, -5-a]$	B	$[a, b]$
C	$[a+5, b+5]$		

3 If the range of f(x) is [a,b], what is the range of g(x)?

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

A	$[3 \cdot a, 3 \cdot b]$	B	$[-b, -a]$
C	$[-3 \cdot b, -3 \cdot a]$		

4 If the domain of f(x) is [a,b], what is the domain of g(x)?

$$g(x) = -f(0.5x)$$

A	$[\frac{-b}{0.5}, \frac{-a}{0.5}]$	B	$[\frac{a}{0.5}, \frac{b}{0.5}]$	C	$[a, b]$

5 If the domain of f(x) is [a,b], what is the domain of g(x)?

$$g(x) = -f(x + 5)$$

A	$[a-5, b-5]$	B	$[a+5, b+5]$
C	$[5-b, 5-a]$		

6 If the domain of f(x) is [a,b], what is the domain of g(x)?

$$g(x) = -f(-x)$$

A		B	
$[a, b]$		$[-b, -a]$	

7 If the range of f(x) is [a,b], what is the range of g(x)?

$$g(x) = 2f(-x)$$

A	$[a, b]$	B	$[-2 \cdot b, -2 \cdot a]$
C	$[2 \cdot a, 2 \cdot b]$		

8 If the domain of f(x) is [a,b], what is the domain of g(x)?

$$g(x) = f(-x - 4)$$

A	$[-b, -a]$	B	$[-4-b, -4-a]$
C	$[a+4, b+4]$		