



## Function Transformations (Definition) - Single Definition (Values) to Transformation

1 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Vertical stretch: 4

A $g(x) = f(4x)$	B $g(x) = 4f(x)$
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2 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Shift left: 3

A $g(x) = f(x) - 3$	B $g(x) = f(x - 3)$
C $g(x) = f(x + 3)$	

3 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Shift right: 2

A $g(x) = f(x - 2)$	B $g(x) = f(x + 2)$
C $g(x) = f(x) + 2$	

4 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Reflect in X-Axis

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

5 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Horizontal compression: 4

A $g(x) = f(4x)$	B $g(x) = 4f(x)$
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6 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Shift up: 2

A $g(x) = f(x - 2)$	B $g(x) = f(x) - 2$
C $g(x) = f(x) + 2$	

7 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Horizontal compression: 2

A $g(x) = 2f(x)$	B $g(x) = f(2x)$
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8 Which function  $g(x)$  shows this transformation of  $f(x)$ ?

Shift right: 5

A $g(x) = f(x - 5)$	B $g(x) = f(x) + 5$
C $g(x) = f(x + 5)$	