

## mobius

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



	U	еп	$\mathbf{n}$	LIO	n	
What door	thic	tron	ofo	rma	tion	n

nis transformation produce in f(x)?

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

What does this transformation g(x) = 0.25 f(x)

 $\mathring{\nabla}$ ertical stretch:  $0.25 \overset{\mathsf{B}}{\nabla}$ ertical compression: 0.25

Α	Shift up: 5	В	Shift right: 5	C Horiz
С	Shift down: 5			

zontal compression: 0.25

3

What does this transformation g(x)=f(5x)

What does this transformation g(x)=f(0.2x)

Vertical compression: 5 Horizontal stretch: 5 Vertical stretch: 0.2 Horizontal stretch: 0.2

Horizontal compression: 5

Horizontal compression: 0.2

5 What does this transformation produce in f(x)?

g(x) = f(x + 3)

What does this transformation g(x)=0.33f(x)

Shift right: 3 Shift down: 3

Vertical stretch: 0.33 Horizontal compression: 0.33  $\stackrel{C}{V}$ ertical compression: 0.33

7

С

Shift left: 3

What does this transformation 
$$g(x)=0.5f(x)$$

What does this transformation produce in f(x)?

Vertical stretch: 0.5 Horizontal compression: 0.5

g(x) = f(x) + 4

 $\stackrel{C}{\mathsf{V}}$ ertical compression: 0.5

Shift up: 4 Shift down: 4 Shift right: 4