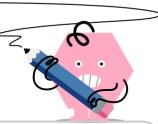# Function Transformations (Domain/Range) - Single Transformed Domain/Range (Values) to Transformation

**1**

If the domain of f(x) is [a,b], which function g(x) would have this domain?

$$[\frac{a}{0.33}, \frac{b}{0.33}]$$

| A | B |
|---|---|
| $g(x) = 0.33f(x)$ | $g(x) = f(0.33x)$ |

**2**

If the domain of f(x) is [a,b], which function g(x) would have this domain?

$$[\frac{a}{0.25}, \frac{b}{0.25}]$$

| A | B |
|---|---|
| $g(x) = 0.25f(x)$ | $g(x) = f(0.25x)$ |

**3** If the range of f(x) is [a,b], which function g(x) would have this range?

$$[a + 4, b + 4]$$

| A | $g(x) = f(x) - 4$ | B | $g(x) = f(x) + 4$ |
|---|---|---|---|
| C | $g(x) = f(x - 4)$ | | |

**4**

If the domain of f(x) is [a,b], which function g(x) would have this domain?

$$[a, b]$$

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

**5**

If the domain of f(x) is [a,b], which function g(x) would have this domain?

$$[\frac{a}{0.2}, \frac{b}{0.2}]$$

| A | B |
|---|---|
| $g(x) = 0.2f(x)$ | $g(x) = f(0.2x)$ |

**6** If the range of f(x) is [a,b], which function g(x) would have this range?

$$[a - 3, b - 3]$$

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

**7** If the range of f(x) is [a,b], which function g(x) would have this range?

$$[a - 2, b - 2]$$

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

**8** If the range of f(x) is [a,b], which function g(x) would have this range?

$$[a + 5, b + 5]$$

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