Name

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

**1**

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

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

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

**2**

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

$$g(x) = f(t \cdot x)$$

| A | B |
|---|---|
| $[\frac{a}{t}, \frac{b}{t}]$ | $[a, b]$ |

**3**

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

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

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

**4**

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

$$g(x) = f(w \cdot x)$$

| A | B |
|---|---|
| $[a, b]$ | $[\frac{a}{w}, \frac{b}{w}]$ |

**5**

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

$$g(x) = f(q \cdot x)$$

| A | B |
|---|---|
| $[a, b]$ | $[\frac{a}{q}, \frac{b}{q}]$ |

**6**

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

$$g(x) = t \cdot f(x)$$

| A | B |
|---|---|
| $[t \cdot a, t \cdot b]$ | $[a, b]$ |

**7**

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

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

| A | B |
|---|---|
| $[a + q, b + q]$ | $[a - q, b - q]$ |

**8**

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

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

| A | B |
|---|---|
| $[a + w, b + w]$ | $[a - w, b - w]$ |