



Function Transformations (Domain/Range) - Double Transformed

Domain/Range (Variables) to

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

$$[-p \cdot b, -p \cdot a]$$

A $g(x) = -p \cdot f(x)$

B $g(x) = p \cdot f(-x)$

C $g(x) = -f(p \cdot x)$

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

$$[q \cdot a, q \cdot b]$$

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

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

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

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

$$\left[\frac{-b}{t}, \frac{-a}{t} \right]$$

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

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

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

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

$$\left[\frac{a-w}{r}, \frac{b-w}{r} \right]$$

A $g(x) = f(r \cdot x + w)$

B $g(x) = f(r \cdot x - w)$

C $g(x) = r \cdot f(x + w)$

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

$$[a - z, b - z]$$

A $g(x) = f(-x + z)$

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

C $g(x) = -f(x + z)$

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

$$[a - r, b - r]$$

A $g(x) = -f(x + r)$

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

C $g(x) = f(-x + r)$

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

$$[-q \cdot b, -q \cdot a]$$

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

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

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

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

$$[a - p, b - p]$$

A $g(x) = f(-x + p)$

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

C $g(x) = -f(x + p)$