Name

Function Transformations (Definition) - Double Definition (Variables) to Transformation

1 Which function g(x) shows these transformations of f(x)?

Vertical compression: n

Horizontal compression: r

A $g(x) = n \cdot f(r \cdot x)$, $n > 1$, $r > 1$

B $g(x) = r \cdot f(n \cdot x)$, $r < 1$, $n > 1$

C $g(x) = n \cdot f(r \cdot x)$, $n < 1$, $r > 1$

2 Which function g(x) shows these transformations of f(x)?

Reflect in X-Axis

Shift left: r

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

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

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

3 Which function g(x) shows these transformations of f(x)?

Shift left: z

Shift down: p

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

B $g(x) = f(x + z) + p$

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

4 Which function g(x) shows these transformations of f(x)?

Reflect in X-Axis

Shift down: w

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

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

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

5 Which function g(x) shows these transformations of f(x)?

Reflect in Y-Axis

Shift left: p

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

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

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

6 Which function g(x) shows these transformations of f(x)?

Shift left: z

Shift down: t

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

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

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

7 Which function g(x) shows these transformations of f(x)?

Vertical stretch: m

Horizontal stretch: q

A $g(x) = q \cdot f(m \cdot x)$, $q > 1$, $m < 1$

B $g(x) = m \cdot f(q \cdot x)$, $m > 1$, $q > 1$

C $g(x) = m \cdot f(q \cdot x)$, $m > 1$, $q < 1$

8 Which function g(x) shows these transformations of f(x)?

Horizontal stretch: r

Shift left: z

A $g(x) = f(r \cdot x + z)$, $r > 1$

B $g(x) = f(r \cdot x + z)$, $r < 1$

C $g(x) = r \cdot f(x + z)$, $r > 1$