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

1 Which function g(x) shows this transformation of f(x)?

Horizontal stretch: r)

A	$g(x) = f(r \cdot x)$ $r > 1$	B	$g(x) = r \cdot f(x)$ $r > 1$
C	$g(x) = f(r \cdot x)$ $r < 1$		

2 Which function g(x) shows this transformation of f(x)?

Horizontal compression: m)

A	$g(x) = f(m \cdot x)$ $m < 1$	B	$g(x) = m \cdot f(x)$ $m < 1$
C	$g(x) = f(m \cdot x)$ $m > 1$		

3

Which function g(x) shows this transformation of f(x)?

Shift down: p

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

4 Which function g(x) shows this transformation of f(x)?

Horizontal compression: t)

A	$g(x) = t \cdot f(x)$ $t < 1$	B	$g(x) = f(t \cdot x)$ $t > 1$
C	$g(x) = f(t \cdot x)$ $t < 1$		

5 Which function g(x) shows this transformation of f(x)?

Vertical stretch: z

A	$g(x) = z \cdot f(x)$ $z < 1$	B	$g(x) = z \cdot f(x)$ $z > 1$
C	$g(x) = f(z \cdot x)$ $z < 1$		

6

Which function g(x) shows this transformation of f(x)?

Shift left: z

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

7

Which function g(x) shows this transformation of f(x)?

Shift left: p

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

8 Which function g(x) shows this transformation of f(x)?

Vertical compression: r

A	$g(x) = r \cdot f(x)$ $r < 1$	B	$g(x) = f(r \cdot x)$ $r > 1$
C	$g(x) = r \cdot f(x)$ $r > 1$		