



## Function Transformations (Vertex) - Single Transformed Vertex (Variables) to Transformation

1

$$\left(\frac{a}{w}, b\right)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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

2

$$(a, -b)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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

3

$$(a - r, b)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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

4

$$\left(\frac{a}{t}, b\right)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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

5

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

$$(a - w, b)$$

A

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

B

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

6

$$(-a, b)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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

7

$$(a, b - p)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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

8

$$(a, p \cdot b)$$

If the vertex of  $f(x)$  is  $(a,b)$ , which function  $g(x)$  would have this vertex?

A

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

B

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