



Function Transformations (Vertex) - Single Transformation (Values) to

Transformed Vertex

1 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$? 2

$$g(x) = f(x - 2)$$

- | | | | |
|---|--------------|---|--------------|
| A | $(a, b + 2)$ | B | $(a - 2, b)$ |
| C | $(a + 2, b)$ | | |

If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = 0.5f(x)$$

A $(a, 0.5 \cdot b)$

B $(\frac{a}{0.5}, b)$

3 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$? 4

$$g(x) = f(x - 4)$$

- | | | | |
|---|--------------|---|--------------|
| A | $(a - 4, b)$ | B | $(a, b + 4)$ |
| C | $(a + 4, b)$ | | |

If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(4x)$$

A $(\frac{a}{4}, b)$

B $(a, 4 \cdot b)$

5 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$? 6

$$g(x) = f(x) + 3$$

- | | | | |
|---|--------------|---|--------------|
| A | $(a + 3, b)$ | B | $(a, b + 3)$ |
| C | $(a, b - 3)$ | | |

If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(x) - 2$$

A $(a, b + 2)$

B $(a, b - 2)$

7 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$? 8

$$g(x) = f(x) + 2$$

- | | | | |
|---|--------------|---|--------------|
| A | $(a, b + 2)$ | B | $(a + 2, b)$ |
| C | $(a, b - 2)$ | | |

If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(0.33x)$$

A $(a, 0.33 \cdot b)$

B $(\frac{a}{0.33}, b)$