



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

1

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

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

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

B $(a, n \cdot b)$

2

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

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

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

B $(a, t \cdot b)$

3

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

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

A $(a - t, b)$

B $(a + t, b)$

4

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

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

A $(-a, b)$

B $(a, -b)$

5

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

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

A $(a, b + p)$

B $(a, b - p)$

6

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

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

A $(a + q, b)$

B $(a - q, b)$

7

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

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

A $(a, p \cdot b)$

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

8

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

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

A $(a + n, b)$

B $(a - n, b)$