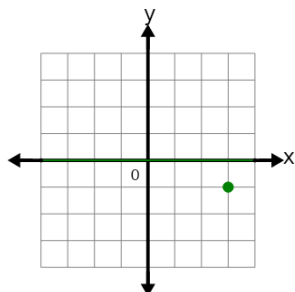




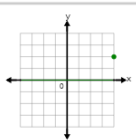
Identify reflections across the x-axis

1

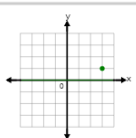
Reflect this point across the X axis



A



B

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

Reflect in X - Axis

Shift right : 3

A

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

B

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

C

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

3Which 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

$$g(x) = f(r \cdot x)$$
$$r < 1$$

4If the vertex of $f(x)$ is (a, b) , which function $g(x)$ would have this vertex? $(a, -(b - 4))$

A

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

B

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

C

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

5 $(-2, -3)$

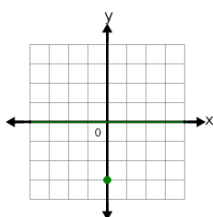
A

 $(-3, -2)$

B

 $(-2, 3)$ **6**

Reflect this point across the X axis



A

 $(-0, -3)$

B

 $(0, 3)$ **7**If the range of $f(x)$ is $[a, b]$, what is the range of $g(x)$?

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

A

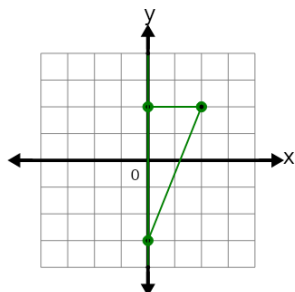
 $[a, b]$

B

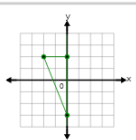
 $[-b, -a]$

**Identify reflections across the x-axis****8**

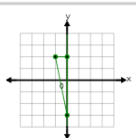
Reflect this shape across the Y axis



A



B

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

$$g(x) = f(0.5x - 5)$$

A

$$\left(\frac{a}{0.5} - 5, b\right)$$

B

$$\left(\frac{a}{0.5} + 5, b\right)$$

C

$$\left(\frac{a}{0.5}, b + 5\right)$$

10What does this transformation produce in $f(x)$?

$$g(x) = -5f(x)$$

A

Reflect in X – Axis
Horizontal stretch : 5

B

Reflect in X – Axis
Vertical compression : 5

C

Reflect in X – Axis
Vertical stretch : 5

11If the vertex of $f(x)$ is (a, b) , what is the vertex of $g(x)$?

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

A

$$(a - z, -b)$$

B

$$(-(a + z), b)$$

C

$$(-(a - z), b)$$

12Which function $g(x)$ shows these transformations of $f(x)$?

Horizontal stretch : 0.5)

Shift right : 5

A

$$g(x) = 0.5f(x - 5)$$

B

$$g(x) = f(0.5x + 5)$$

C

$$g(x) = f(0.5x - 5)$$