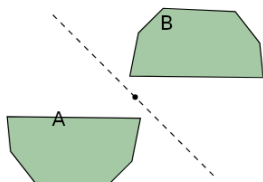




Apply reflections across coordinate axes

1

Is the transformation of shape A into shape B a Reflection?

☐ A Not a Reflection☐ B Reflection**2**

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

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

A

$$(a - 3, b)$$

B

$$(a + 3, b)$$

3

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

Vertical compression : n

A

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

B

$$g(x) = n \cdot f(x)$$
$$n > 1$$

C

$$g(x) = f(n \cdot x)$$
$$n > 1$$

4

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

Horizontal stretch : 0.33

Shift right : 3

A

$$g(x) = f(0.33x + 3)$$

B

$$g(x) = f(0.33x - 3)$$

C

$$g(x) = 0.33f(x - 3)$$

5

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

$$g(x) = q \cdot f(x) - p$$
$$q < 1$$

A

Vertical compression : q
Shift down : p

B

Vertical compression : q
Shift up : p

C

Horizontal compression : q
Shift down : p

6

If 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

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



Apply reflections across coordinate axes

7What does this transformation produce in $f(x)$?

$$g(x) = 0.33f(x + 3)$$

A

Horizontal compression : 0.33
Shift left : 3

B

Vertical stretch : 0.33
Shift left : 3

C

Vertical compression : 0.33
Shift left : 3

8If the vertex of $f(x)$ is (a,b) , which function $g(x)$ would have this vertex?

$$\left(\frac{a}{m} - q, b\right)$$

A

$$g(x) = f(m \cdot x + q)$$

B

$$g(x) = m \cdot f(x + q)$$

C

$$g(x) = f(m \cdot x - q)$$

9 $(-1, -2)$

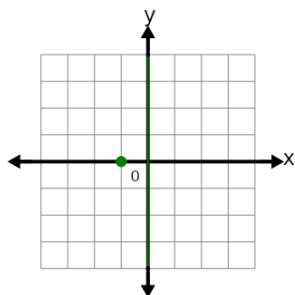
A

 $(-1, 2)$

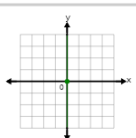
B

 $(1, 2)$ **10**

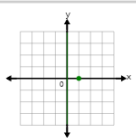
Reflect this point across the Y axis



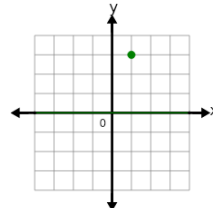
A



B

**11**

Reflect this point across the X axis



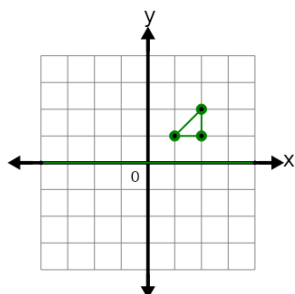
A

 $(1, -3)$

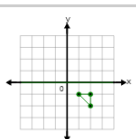
B

 $(-1, 3)$ **12**

Reflect this shape across the X axis



A



B

