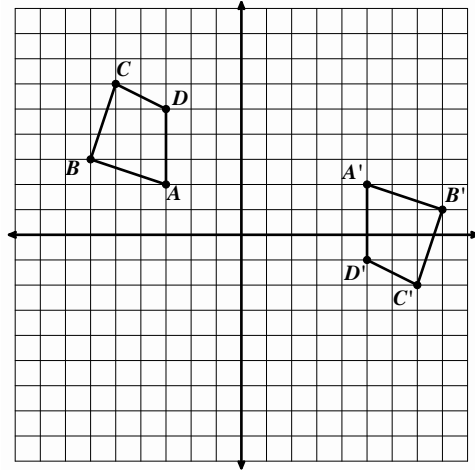


Math One Release Items

1. Describe TWO possible details of the transformation.

Note: It is not enough to simply "draw" the transformation. If the object has been translated, write what translation has happened using translation notation. If it has been reflected, write the equation of the line where it has been reflected. If the object has been rotated, provide the center of rotation, the direction, and how far the object has been rotated.



2. Which explicit function best matches the recursive function

$$f(1) = -4, f(x) = f(x - 1) + 4 ?$$

a. $f(x) = -4x + 4$

c. $f(x) = 4x$

b. $f(x) = 4x - 4$

d. $f(x) = 4x - 8$

3. Which sequence best matches the explicit function $f(x) = 3 \cdot (-2)^x$

a. 6, -12, 24, -48, 96

b. -6, 12, -24, 48, -96

c. -2, -6, -18, -54, -162

d. $-\frac{3}{2}$, -2, -18, -54

4. Which interval, written in Set Notation, matches the following interval written in Interval Notation: $(-\infty, \infty)$?

a. $\{x \mid x \in \mathbb{R}\}$

b. $\{x \mid -\infty \geq x \geq \infty\}$

c. $\{x \mid x \in \mathbb{W}\}$

d. $\{x \mid x < 0\}$

5. If $f(x) = g(x) + 8$, and $f(x) = 4 \cdot 9^x$, then

a. $g(x) = 4 \cdot 9^x + 8$

b. $g(x) = 12 \cdot 9^x$

c. $g(x) = 4 \cdot 9^x - 8$

d. $g(x) = -4 \cdot 9^x$

6. Which of the following words do you *know for certain* describes the following function? Some of the items might apply, select the item that we are certain applies.

x	y
2	-8
5	-23
9	-43
-2	12

a. Linear

b. Exponential

c. Increasing

d. Continuous

e. None of the above