

Name: _____ Date: _____

NTI-Snow Day 10 Assessment

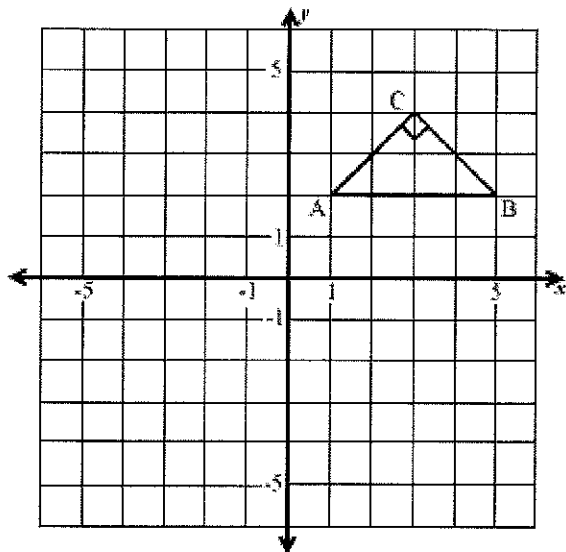
Question 1 of 10

You have a triangle centered about the origin with one of its vertices at $(2, -4)$. Where will the vertex be on the coordinate plane if you dilate the triangle by halving its size?

- A. $(-4, 2)$
- B. $(-2, 4)$
- C. $(1, -2)$
- D. $(-1, 2)$

Question 2 of 10

The triangle in the grid below is going to be rotated 180° around point C.



What will be the coordinates of point B' in the rotated image?

- A. $(1, 4)$
- B. $(1, 6)$
- C. $(5, 4)$
- D. $(5, 6)$

Question 3 of 10

Find the coordinates of the vertices of the image when $\triangle ABC$ is dilated by a factor of 2. The vertices for the preimage are $A(1,1)$, $B(2,2)$ and $C(1,3)$.

- A. $A'(2,2)$, $B'(4,4)$ and $C'(6,6)$.
- B. $A'(2,2)$, $B'(4,4)$ and $C'(2,5)$.
- C. $A'(2,2)$, $B'(4,4)$ and $C'(2,6)$.
- D. $A'(-2,-2)$, $B'(4,4)$ and $C'(2,8)$.

Question 4 of 10

A rectangle has the coordinates $A(-4, 2)$, $B(-4, -2)$, $C(4, -2)$, and $D(4, 2)$. If the center of dilation is at the origin and the rectangle is dilated to half its size, determine the coordinates of the image.

- A. $A'(-2, 1)$, $B'(-2, -1)$, $C'(2, -1)$, $D'(2, 1)$
- B. $A'(-2, 2)$, $B'(-2, -2)$, $C'(2, -2)$, $D'(2, 2)$
- C. $A'(-8, 4)$, $B'(-8, -4)$, $C'(8, -4)$, $D'(8, 4)$
- D. $A'(-8, 2)$, $B'(-8, -2)$, $C'(8, -2)$, $D'(8, 2)$

Question 5 of 10

If triangle ABC $A(-1, 4)$, $B(2, 1)$, $C(0, -3)$ is translated 2 units up, what are the new coordinates for triangle $A'B'C'$?

- A. $A(-1, 6)$, $B(2, 3)$, $C(0, -1)$
- B. $A(-1, 2)$, $B(2, -1)$, $C(0, -5)$
- C. $A(-3, 4)$, $B(0, 1)$, $C(-2, -3)$
- D. $A(4, -1)$, $B(1, 2)$, $C(-3, 0)$

Question 6 of 10

Triangle ABC A(-3, -1), B(-1, -2), C(-2, -3) is reflected across the y-axis. What are the new coordinates for triangle A'B'C' after the transformation?

- A. A(-3, 1), B(-1, 2), C(-2, 3)
- B. A(-3, 1), B(-1, 0), C(-2, 1)
- C. A(3, -1), B(1, -2), C(2, -3)
- D. A(3, 1), B(1, 2), C(2, 3)

Question 7 of 10

$\triangle XYZ$ is translated 3 units up and 2 units to the right.

If X(2, -1), Y(-3, -2), and Z(-1, 5), what is $\triangle X'Y'Z'$?

- A. X'(4, -4), Y'(-1, -5), Z'(1, 2)
- B. X'(4, 2), Y'(-1, 1), Z'(1, 8)
- C. X'(0, 2), Y'(-3, 1), Z'(-1, 8)
- D. X'(-4, -2), Y'(1, -1), Z'(-1, -8)

Question 8 of 10

The coordinates of the vertices of a rectangle are A(-2,-2), B(-2,2) C(4,2)and D(4,-2). If rectangle ABCD is dilated by a factor of 3 what is the perimeter of the new rectangle?

- A. 20 units sq.
- B. 30 units sq.
- C. 60 units sq.
- D. 216 units sq.

Question 9 of 10

When $V(5, 3)$, $H(6, -1)$, and $K(2, -1)$ are reflected across the line $y = x$, what are the coordinates for V' , H' , and K' ?

- A. $V'(3, -5)$, $H'(1,6)$, and $K'(-1, -2)$
- B. $V'(3, 5)$, $H'(6,1)$, and $K'(-1, -2)$
- C. $V'(3,5)$, $H'(-1,6)$, and $K'(-1,2)$
- D. $V'(-3, -5)$, $H'(-6, -1)$, and $K'(-1,-2)$

Question 10 of 10

Triangle ABC $A(0, 6)$, $B(2, 2)$, $C(3, 4)$ is translated 2 units left and 1 unit down. What are the new coordinates for triangle $A'B'C'$ after the transformation?

- A. $A(2, 5)$, $B(4, 1)$, $C(5, 3)$
- B. $A(-2, 5)$, $B(0, 1)$, $C(1, 3)$
- C. $A(2, 7)$, $B(4, 3)$, $C(5, 5)$
- D. $A(-2, 7)$, $B(0, 3)$, $C(1, 5)$