BECA / Dr. Huson / Geometry Name:
9 January 2019

Do Now: Transformations

1.

What is the image of the point $(2,-3)$ after the transformation $r_{y\text{-axis}}$?

(1) $(2,3)$
(2) $(-2,-3)$
(3) $(-2,3)$
(4) $(-3,2)$

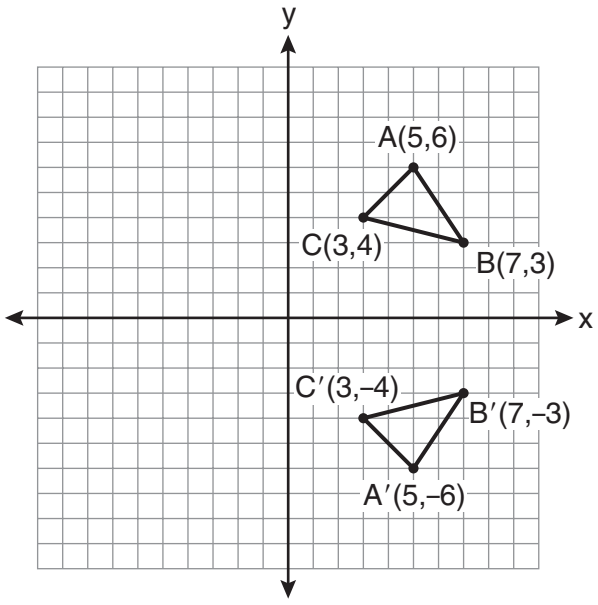
2.

When a quadrilateral is reflected over the line $y = x$, which geometric relationship is *not* preserved?

(1) congruence
(2) orientation
(3) parallelism
(4) perpendicularity

3.

Which expression best describes the transformation shown in the diagram below?



(1) same orientation; reflection
(2) opposite orientation; reflection
(3) same orientation; translation
(4) opposite orientation; translation

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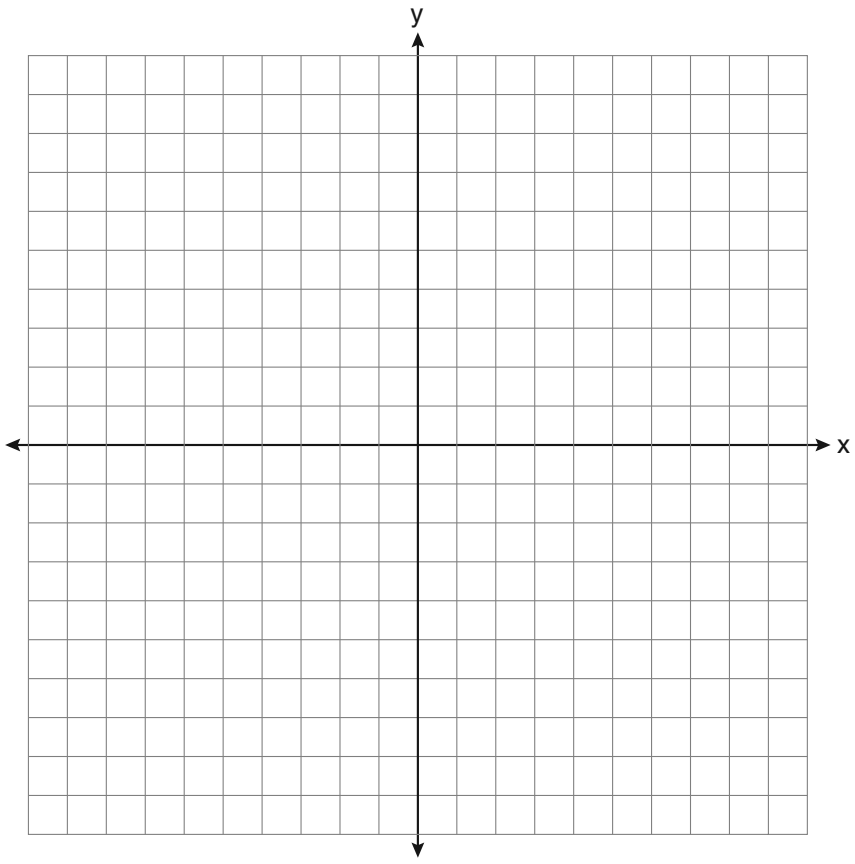
4. Triangle *DEG* has the coordinates $D(2, 1)$, $E(6, 2)$, and $G(6, 6)$. Triangle *DEG* is translated $T_{-8, +1}$. Complete the table mapping each coordinate pair onto its image, then plot and label both triangles on the grid.

$$T_{-8, +1}$$

$D(2, 1) \quad \rightarrow$

$E(6, 2) \quad \rightarrow$

$G(6, 6) \quad \rightarrow$



Justify that the transformation preserves distance.