### **Training Header Sheet with Change Log Form**

# Kentucky Math Operational

# Grade 8/Math Geometric transformations MA082007

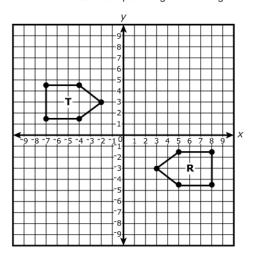
**Anchor Set** 

Date	Comments	Version
11.2022	Initial Operational Training Set	Set A

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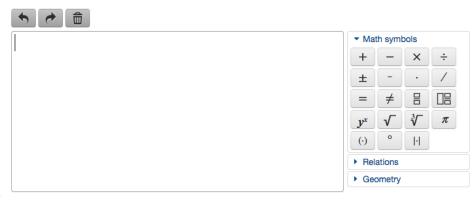
# Prompt

Figure R and Figure T are shown on the coordinate plane. Figure R is congruent to Figure T.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

Enter your answer and your descriptions in the space provided.

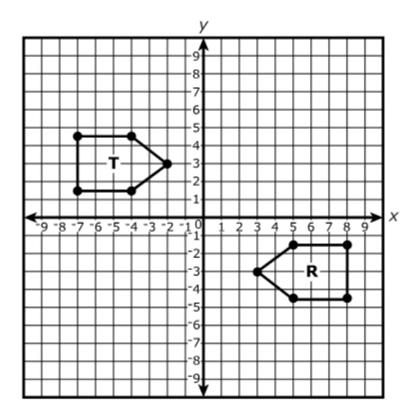


# Rubric

#### MA0820071

lent demonstrates a complete understanding of describing a sequence of metric transformations that exhibit the congruence between two figures.  lent demonstrates a partial understanding of describing a sequence of metric transformations that exhibit the congruence between two figures.
metric transformations that exhibit the congruence between two figures.
lant response is completely incorrect or irrelevant
lent response is completely incorrect or irrelevant.
tudent response.
<ul> <li>Score 2 points:         <ul> <li>Includes the correct reflections and the axis of reflection for both reflections, and the correct translation. OR</li> <li>Includes the correct rotation including the amount of rotation and the correct translation.</li> </ul> </li> <li>Score 1 point:         <ul> <li>Includes 2 reflections and a translation with limited information or no information about the axis of reflection or the number of units the figure is translated. OR</li> <li>Includes rotation and translation with limited or no information about the number of degrees of the rotation or the number of units of the translation. OR</li> <li>Includes a partial sequence of moves that is correct or incomplete.</li> </ul> </li> </ul>
re R is first reflected across the y-axis, then Figure R is reflected across the is, and finally translated 1 unit right to obtain Figure T.  re R is rotated 180° (clockwise or counter-clockwise) about the origin, then slated 1 unit right to obtain figure T.  e: Alternative valid sequence of transformations are acceptable.

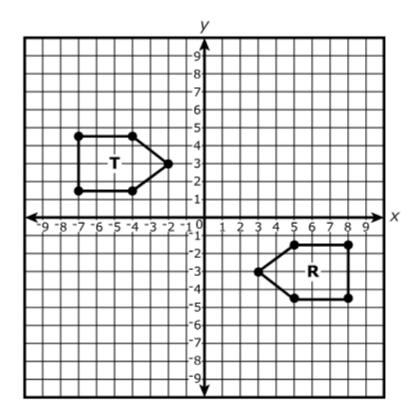
Figure R and Figure T are shown on the coordinate plane. Figure R is congruent to Figure T.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

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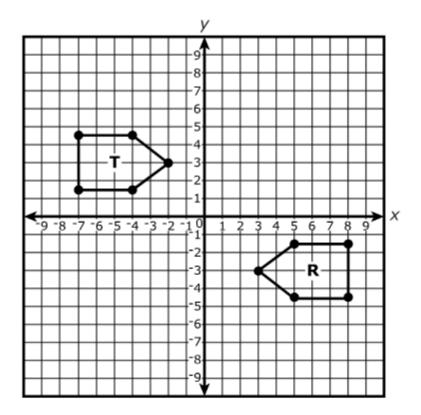
Figure R is congruent to Figure T through the following Geometric transformations; First, Reflect over the X axis. Next, reflect over the Y axis. Lastly, transition all points of R to the right by +1. By following each movement in the right order, R will have overlaped Figure T, with all points alligning. With this result, you can conclude that Figure T is congruent to Firgure R.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

Enter your answer and your descriptions in the space provided.

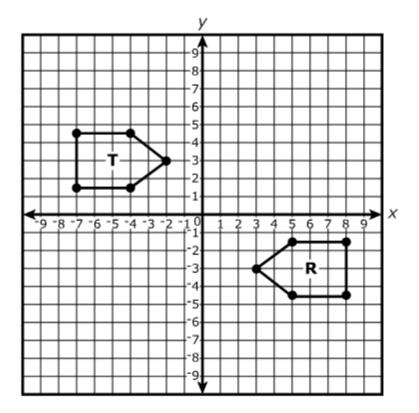
First, it would rotate  $180\,^\circ$  clockwise. Then, it would be translated right one unit.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

Enter your answer and your descriptions in the space provided.

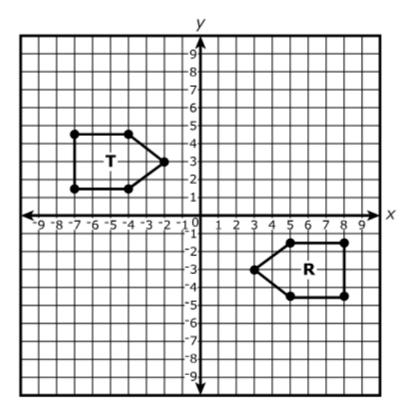
First, you can reflect over the y axis. Translate to the right one. Then, translate down 6 cubic units.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

Enter your answer and your descriptions in the space provided.

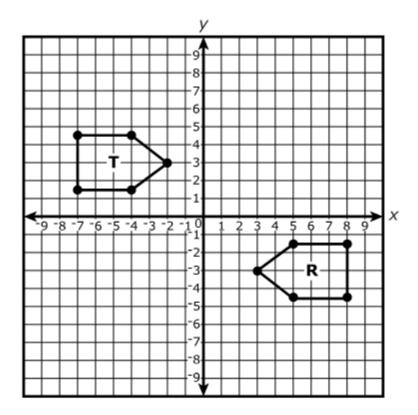
Make figure R reflect off the y axis, then refelct figure R off the x axis, then translate every point in figure R up 1 unit.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

Enter your answer and your descriptions in the space provided.

you can rotate  $180\,^\circ$  clockwise to get the two shapes to match up

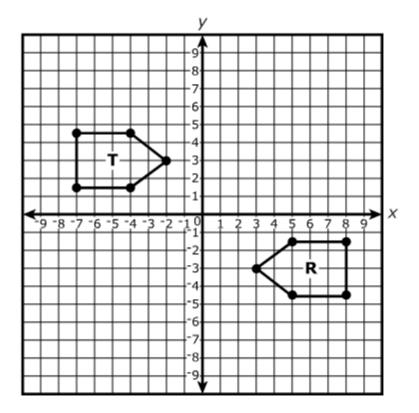


Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

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translate down 5 then reflect over the y axis.

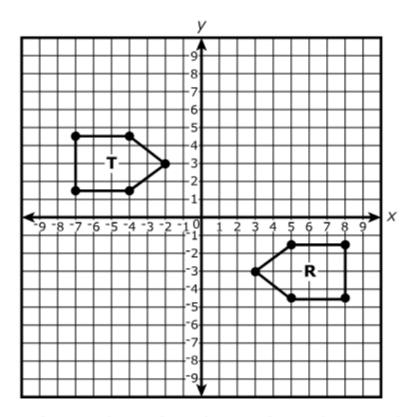
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Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

Enter your answer and your descriptions in the space provided.

I know that figure R is congruent to firgure T because if you reflect figure R, slide up 3, and over 5 spaces then they will be on top of each other. This proves figures R and T are the same size because if they weren't then they would not fit on top of each other perfectly.

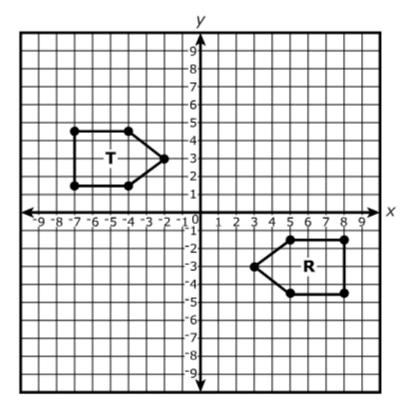


Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

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this is a rotation.  $90^{\circ}$ 

Figure R and Figure T are shown on the coordinate plane. Figure R is congruent to Figure T.



Which sequence of geometric transformations can be used to prove that Figure R is congruent to Figure T? Include any necessary units, direction, axes, or degrees in your description.

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they both are the same kind of shape they but the only thing that is different is that they are pointing to different spots like Figure R is pointing to the left of the screen while Figure T is pointing to the right of the screen