

Name: _____

Determining Transformations

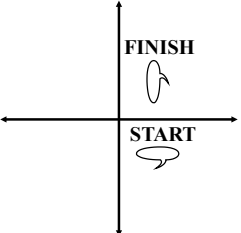
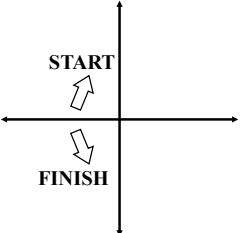
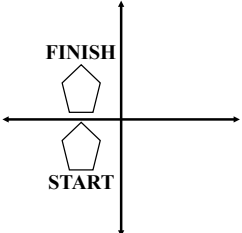
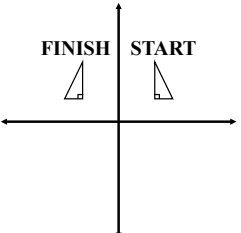
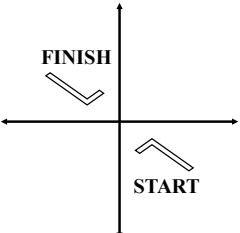
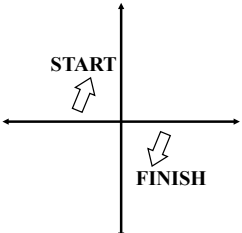
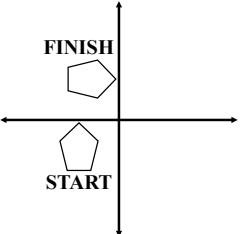
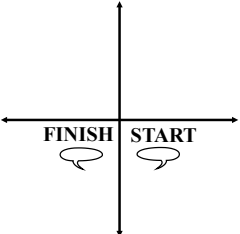
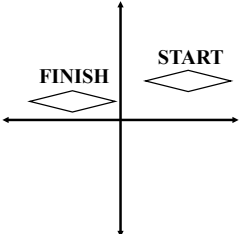
There are three basic transformations: translations (moves), rotations (turns), and reflections (flips).

Translations are when the figure moves up, down, left and/or right
(figure will look the same, just in a new place).

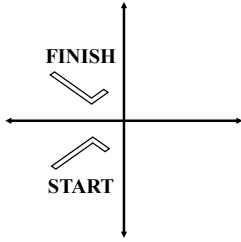
Rotations are when a figure is turned around a point, often the origin.
(the figure will have spun around and be facing a new direction, possibly in a new place).

Reflections are when a figure is flipped over a line.
(figure will look like its mirror image and usually be in a new place).

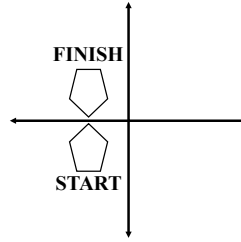
Sometimes, the same figure could have been transformed using more than one of these transformations, with the same result. For the images below, determine which of these three transformations changed the starting figure into the final result.

<p>EXAMPLE</p>  <p>The figure turned, so it's a rotation.</p>	<p>EXAMPLE</p>  <p>The figure flipped, so it's a reflection.</p>	<p>EXAMPLE</p>  <p>The figure didn't flip or turn, it just moved. So it's a translation.</p>
<p>1.</p> 	<p>2.</p> 	<p>3.</p> 
<p>4.</p> 	<p>5.</p> 	<p>6.</p> 

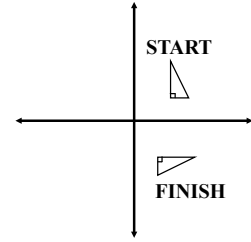
7.



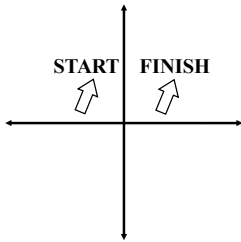
8.



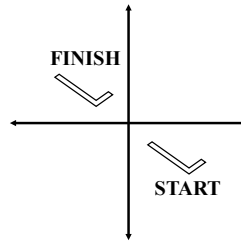
9.



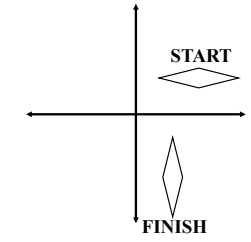
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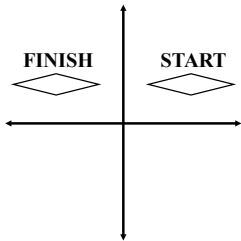
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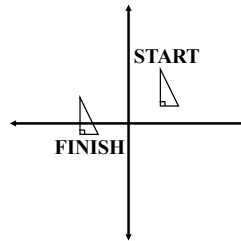
12.



13.



14.



15.

