November 2016 Lew Douglas and Henri Picciotto

Properties of Transformations

Write T (True) or F (False) in each cell in the first three columns.

The remaining columns can be used later for two other important transformations.

Under this transformation	Translation	Rotation	Reflection	Glide Reflection	Dilation
<u>Distance</u> is preserved. In other words, line segments map to line segments of the same length.					
<u>Parallelism</u> is preserved. In other words, parallel lines map to parallel lines.					
Angle measure is preserved. In other words, angles map to angles of the same measure.					
<u>Collinearity</u> is preserved. In other words, if three points line on a line, then their images lie on a line, the image line.					
Betweeness is preserved. In other words, if B is between A and C on a line, then B' is between A' and C' on the image.					
Orientation is preserved. In other words, if moving from point A to point B to point C etc. is in the clockwise direction, then moving from point A' to point B' to point C' is also in the					
clockwise direction.					