

Name _____ Date _____

Check for Understanding

Represent Similarity with Proportions: Investigation 2

- Determine whether each statement is true or false. *Circle true or false.*
 - Congruent figures have the same shape, but not necessarily the same size.
True False
 - Congruent figures have a scale factor of 1.
True False
 - If rigid motion transformations and a dilation with any scale factor other than 1 map a pre-image to an image, then the figures are similar but not congruent.
True False
- After a dilation, $\overline{Q'R'}$ is the image of \overline{QR} . Match each set of segment lengths with the appropriate scale factor.

A. $QR = 18$ units, $Q'R' = 6$ units	I. 2.5
B. $QR = 6$ units, $Q'R' = 24$ units	II. $3\frac{2}{3}$
C. $QR = 4$ units, $Q'R' = 10$ units	III. $\frac{1}{3}$
D. $QR = 3$ units, $Q'R' = 11$ units	IV. 4
- An equilateral triangle with sides of 8 centimeters is dilated in reference to the origin in order to form an equilateral triangle that has sides 4 centimeters in length. If (a, b) is a point on the original triangle, which are the coordinates of the corresponding point on the triangle that has been dilated?

A. $\left(-\frac{1}{2}a, -\frac{1}{2}b\right)$	B. $\left(\frac{1}{2}a, \frac{1}{2}b\right)$
C. $(2a, 2b)$	D. $(-2a, -2b)$
- Describe the relationship between two figures that are similar.

