Lesson Summary

Similarity is defined as mapping one figure onto another as a sequence of a dilation followed by a congruence (a sequence of rigid motions).

The notation means that is similar to

Problem Set

1. In the picture below, we have a triangle that has been dilated from center by scale factor . It is noted by *.* We also have a triangle , which is congruent to triangle (i.e., ). Describe the sequence of a dilation, followed by a congruence (of one or more rigid motions ) that would map triangle onto triangle .

Macintosh HD:Users:shassan:Dropbox:Module 3:Images:Similarity:ps1s.pdf

1. Macintosh HD:Users:shassan:Dropbox:Module 3:Images:Similarity:new ps2s.pdfTriangle was dilated from center by scale factor . The dilated triangle is noted by *.* Another triangle is congruent to triangle  *(*i.e., . Describe the dilation followed by the basic rigid motions that would map triangle onto triangle.
2. Macintosh HD:Users:Stefanie:Desktop:ps3.pdfAre the two figures shown below similar? If so, describe a sequence that would prove the similarity. If not, state how you know they are not similar.
3. Macintosh HD:Users:Stefanie:Desktop:ps4.pdfTriangle is similar to triangle (i.e., ). Prove the similarity by describing a sequence that would map triangle onto triangle *.*
4. Macintosh HD:Users:Stefanie:Desktop:ps4 copy.pdfAre the two figures shown below similar? If so, describe a sequence that would prove . If not, state how you know they are not similar.
5. Describe a sequence that would show

