Definitions:

Congruent (≅) Polygons:

Similar (~) Polygons:

Given the pairs of similar shapes,
A. Identify the corresponding vertices (A corresponds with A', …..)
B. Determine the scale – write the proportions
C. Solve the proportions (two at a time) to determine the unknown lengths of any segments

1. \[ \frac{6}{15} = \frac{10}{6} \]

2. \[ \frac{6}{8} = \frac{8}{14} \]

Determine similar polygons and use proportions to determine the lengths of any missing sides.

3. \[ \frac{9}{15} = \frac{6}{10} \]

4. \[ \frac{9}{15} = \frac{6}{10} \]
Determine similar polygons and use proportions to determine the lengths of any missing sides.

5.

6.

7. Application: If a 6 foot person casts a 10 foot shadow, how long is the shadow of a building that is 50 feet tall? (Hint: make a sketch)

HW: 9.2c Problems 5-6, 49-67 and Indirect Measure Worksheet