Intro to Geometry (G-SRT.2)
Unit 2: Proportions and Polygon Similarity (HW1)

Name: _____
Date: _____ Period: _____

1. Solve each proportion using cross products.

a) $\frac{x+1}{6} = \frac{x-1}{x}$

x = _____

b) $\frac{3}{4} = \frac{9}{x-7}$

x = _____

c) $\frac{x-9}{x} = \frac{2}{5}$

x = _____

d) $\frac{x}{5} = \frac{4}{16}$

x = _____

2. Solve the following problems. (Show all work)

a) A picture that is 3 in. wide by 5 in. high was enlarged so that the width was 15 inches. How high is the enlarged picture?

b) Cameron has been eating 2 dollar menu burgers every week. At that rate, how many hamburgers will he eat in 4 weeks?

c) A triangle's three angles are in the ratio of 5:7:8. What is the measure of the smallest angle?

d) A 6 foot high school boy casts a shadow of 24 inches. At the same time of day a girl at the elementary school park casts a shadow of 14 inches. How tall is she (in feet)?

3. What would be the best (most specific) name for the shape that has the following ratios for it ANGLES.

a) 3:4:3 _____

b) 4:4:4:4 _____ or _____

4. Solve the following problems. (show all work)

a) Two numbers are in ratio 7:3. The sum of the two numbers is 36. What is the largest number?

b) Three numbers are in the ratio of 2:5:3. The largest number is 65. What is the smallest number?