

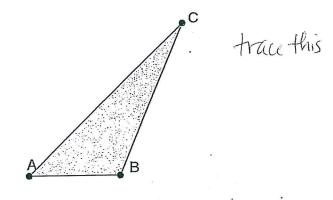
1) Solve for x:

$$\frac{36}{x-6} = \frac{12}{x}$$

2) Dilate $\triangle ABC$ by a scale factor of 0.5 using point S as the center of dilation. Use a ruler, show measurements to justify. Name dilation $\triangle A'B'C'$.

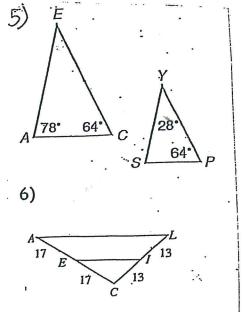
Write a proportion and solve. Define your variable. Write answer in words. Sketch if applicable. (for problems 3-4)

3) A recipe for a dozen cookies calls for $\frac{3}{4}$ cup of shortening. How many cups of shortening are needed to make 8 dozen cookies?



4) If a 36 foot tree casts a 28 foot shadow at the same time that a nearby building casts a 70 ft shadow, how tall is the building?

5-6: Are the triangle similar? If so, write a similarity statement and give a reason for the similarity.



7) A copy machine can enlarge a figure by the ratio of 2 to 3. Find the lengths of the sides and the angle measurements of the enlarged triangle.

