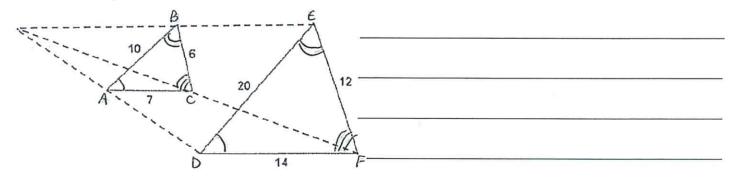
1. Is triangle ABC similar to triangle DE ? Explain your reasoning using both your knowledge of sides and angles. Show your work.



2. For each statement, decide whether you agree or disagree with it and explain your reasoning.

Statement	True	False	Explain your reasoning
All rectangles are similar.			
All triangles are similar.			
When I enlarge a geometric figure by a ratio of 2, both the sides and angles double in size.			
All Circles are similar			
All Squares are similar			

3. A girl is 4ft 6in tall and casts a shadow that is 8 ft. 6 in. long. The end of her shadow coincides with the end of the shadow cast by a building 140 ft from the girl. Find the height of the building. Explain or show how you found your answer. DRAW A PICTURE. Round your answer to the nearest tenth of a foot.

4. A family picture is 4"(width) by 6"(length). You want to enlarge the picture so that the new length is 14". What will the new width be of the enlarged photo? Draw a picture. Show your work. Round your answer to the nearest tenth of an inch.

5. A flagpole casts a 10 foot shadow. At the same time a 15 ft tree casts a 28 foot shadow. How tall is the pole? Draw a picture. Show your work. Round your answer to the nearest tenth of a foot.