

## Perimeter: Congruent and Similar Shapes

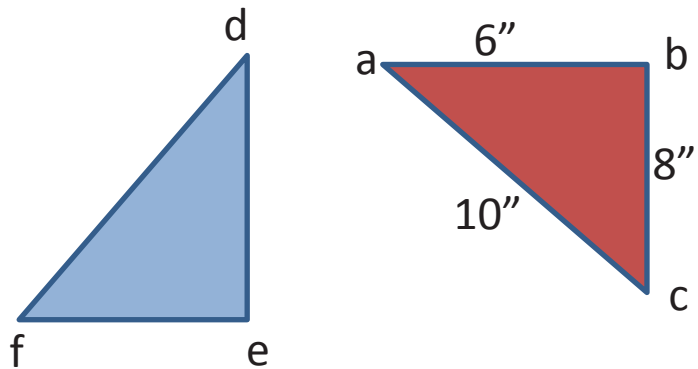
1. Think about time when you wanted to know if two shapes were exactly the same size, or *congruent*. Sketch the shapes and explain why it was important that the two shapes be the same size.
  
2. Think about a situation when you wanted to know if two objects have exactly the same shape, but not the same size. Sketch the shape and explain why it was important that the two objects be the same shape.
  
3. You have a picture that is 3" x 4". You want to mat it and put it into a frame that has the same width border all the way around it. What size frame might you use? Sketch your frame and show how you determined its size.

4. Carlos is planning to put a fence around his rectangular swimming pool which measures 14 feet by 28 feet. If he plans to place the fence 6 feet away from the pool, what will be the perimeter of the fence? Sketch a drawing below to help you "see" the situation.

5. Leslie is creating a playhouse whose length and width will be  $\frac{1}{20}$  the size of her house's measurements. Her playhouse will be 4 feet by 6 feet. What is the size of the house?

6. The two triangles on the right are congruent.

If  $\angle a = \angle d$  and  $\angle c = \angle f$ , what is the length of side  $fe$ ?



7. The two rectangles below are similar.

If rectangle  $efgh$  is 4 times larger than rectangle  $abcd$ , what is its perimeter?

