$\qquad$

Similarity: $\qquad$

- Shapes can be translated, rotated or dilated and still be similar!

Angles are $\qquad$ Sides are $\qquad$

- Scale Factor:

Similarity Criteria:
1.


2
3.

$\qquad$

1. Using the scale factor of $1 / 2$ to construct the image! (Be careful with angle markings!)


2 Using the scale factor of 4 to construct the image! (Be careful with angle markings!)


3. Solve for $x$ :


If $\triangle T S R \sim \triangle D C B$


$\qquad$


4.Determine if the following triangles are congruent. If so, state by which criteria.

$\qquad$


## 5. Draw and Label a picture to solve:

A 10 -foot flagpole casts a shadow that is 14 feet long. If the light pole casts a shadow that is 20 feet long, how tall is the light pole?

The dugout is 8 feet tall and casts a show that is 3 feet long. If the fence casts a shadow that 12 feet long, how tall is the fence?

Mrs. Lassiter is 5 feet tall and her shadow is 20 feet long. The school cast a shadow of 250 feet. How tall is the school?

