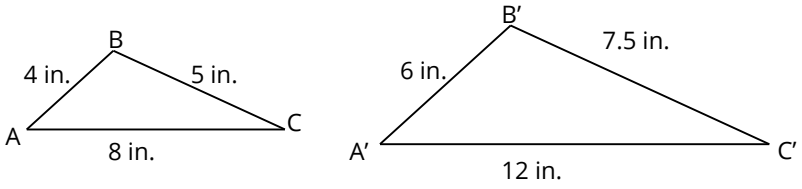
Possible Solutions

Possible Solution 1

- Triangle ABC was dilated to create triangle A'B'C'.



- Write a proportion that shows the relationship between the two triangles.
- Writing the proportions between:

$$\frac{AB}{A'B'} = \frac{BC}{B'C'}, \frac{BC}{B'C'} = \frac{AC}{A'C'}, \frac{AB}{A'B'} = \frac{AC}{A'C'}$$

$$\frac{4}{6} = \frac{5}{7.5}. \frac{5}{7.5} = \frac{8}{12}, \frac{4}{6} = \frac{8}{12}$$

- Writing the proportions within:

$$\frac{AB}{BC} = \frac{A'B'}{B'C'}, \frac{BC}{AC} = \frac{B'C'}{A'C'}, \frac{AB}{AC} = \frac{A'B'}{A'C'}$$

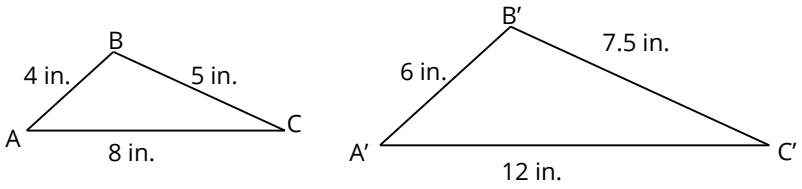
$$\frac{4}{5} = \frac{6}{7.5}, \frac{5}{8} = \frac{7.5}{12}, \frac{4}{8} = \frac{6}{12}$$

Possible Solution 2

- When setting up the proportion between two similar figures it is important that corresponding sides are being compared. This can occur within the two figures.
- Such as $\frac{AB}{BC}$ and $\frac{A'B'}{B'C'}$. Once the corresponding sides have been established, then the sides can be replaced by the values for the side lengths.
- There are a variety of possible proportions for this situation.

$$\frac{4}{5} = \frac{6}{7.5}$$

- Triangle ABC was dilated to create triangle A'B'C'.

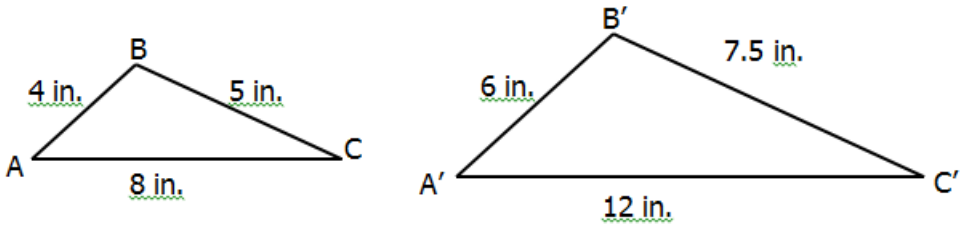


- Write a proportion that shows the relationship between the two triangles.

$$\frac{4}{5} = \frac{6}{7.5}$$

Possible Solution #3

- Triangle ABC is similar to triangle A'B'C'.



Possible Solution:

$$\frac{AB}{A'B'} = \frac{BC}{B'C'}$$

$$\frac{4}{6} = \frac{5}{7.5}$$