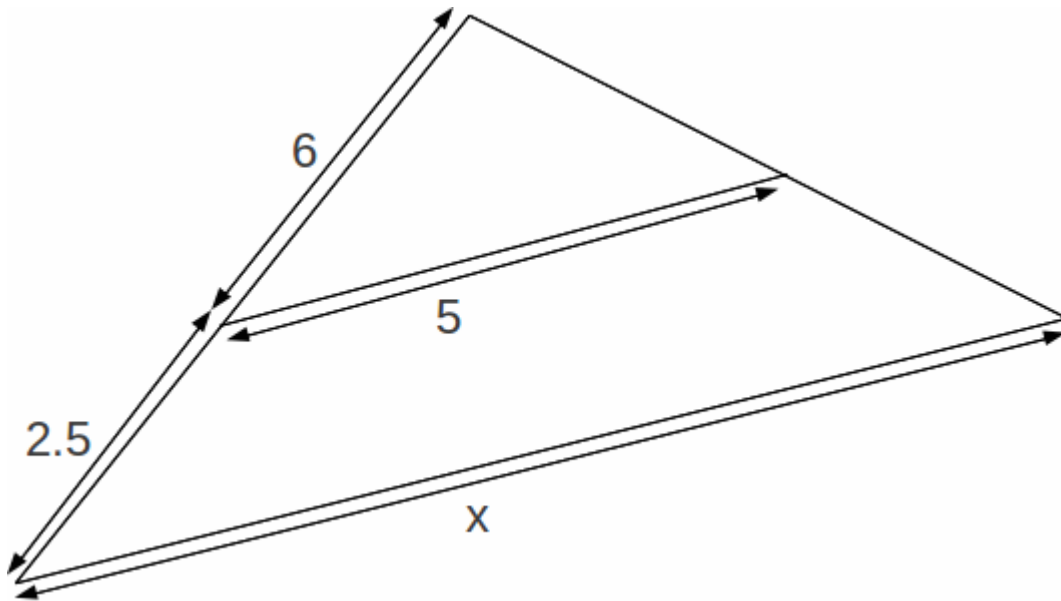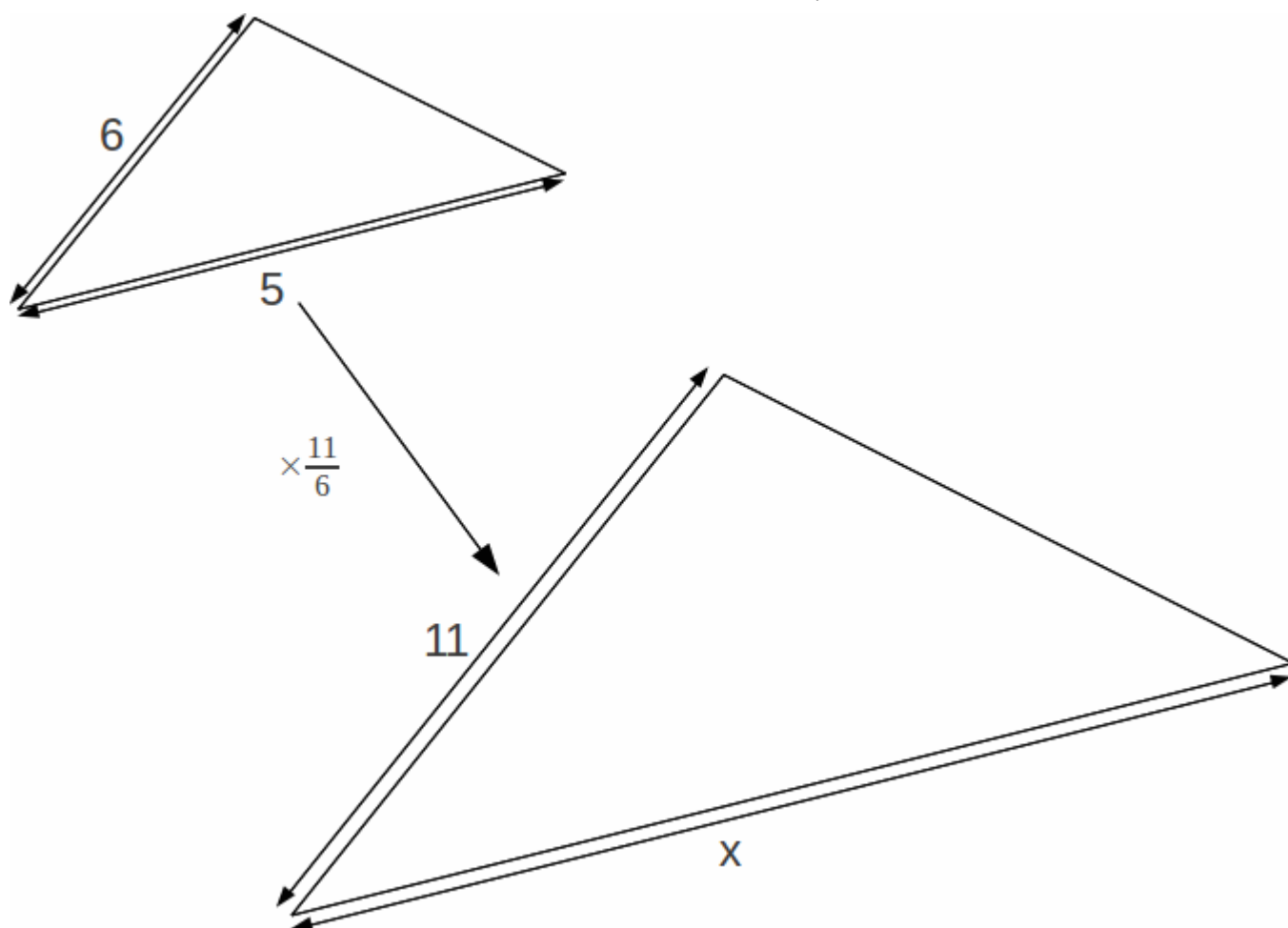# Ratios and Similar Shapes

If a shape is enlarged, so that all the sides are multiplied by the same factor, it will remain the same basic shape, the only difference being that all the sides are larger by the same factor. Sometimes though, we may deconstruct a diagram into similar shapes so that an enlargement exists from one shape onto the other. For example, consider the shape below:

We may separate the shape into a smaller and a larger triangle, shown below.

The enlargement from the smaller to the larger is $\dfrac{11}{6}$ (by considering the sides 6 and 11), hence $5\times\dfrac{11}{6}=x\rightarrow x=\dfrac{55}{6}$.