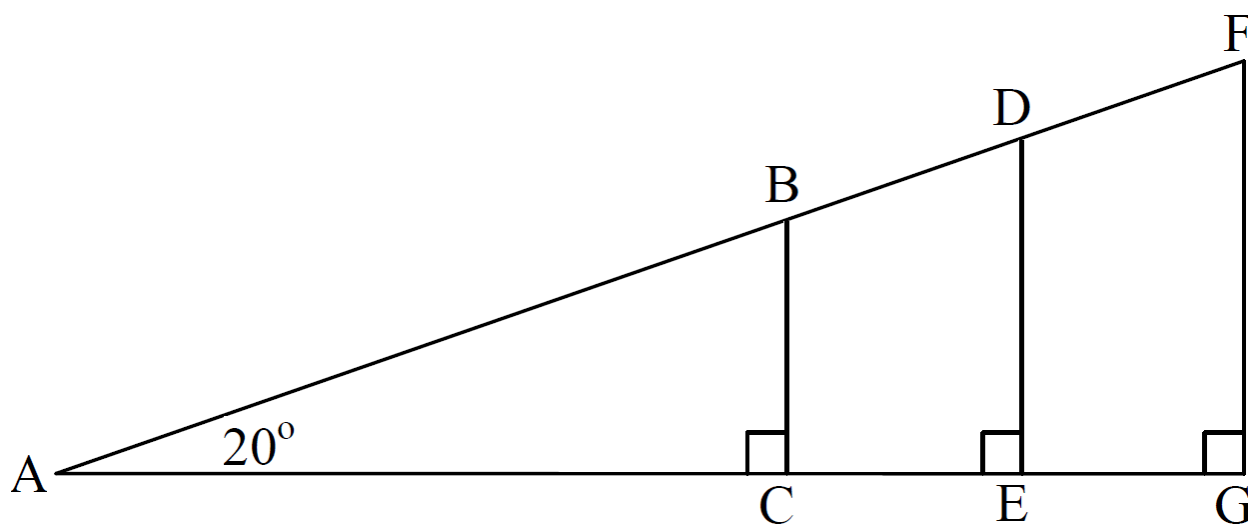


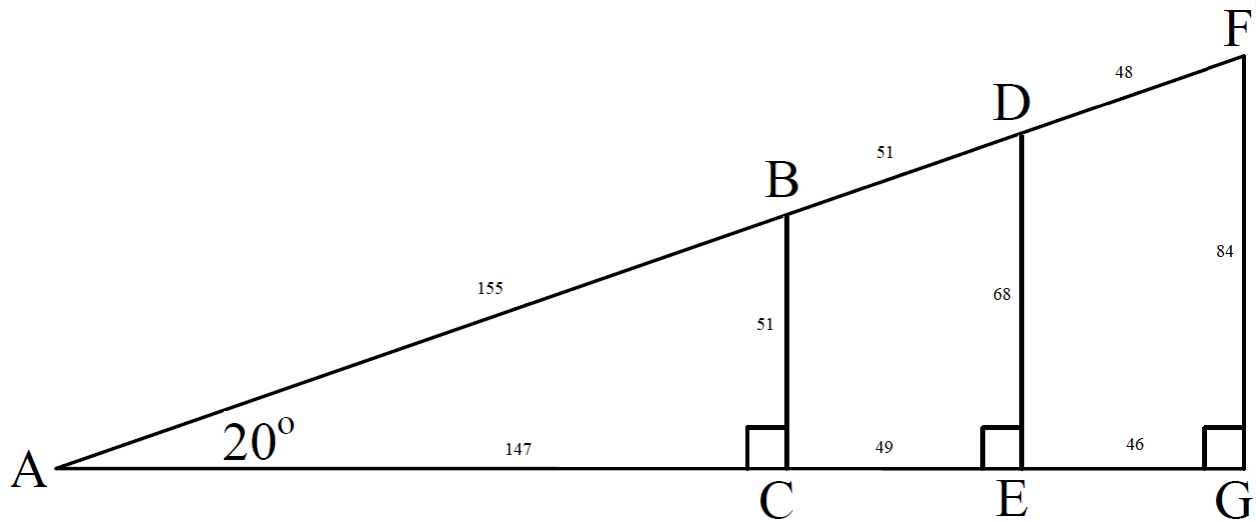
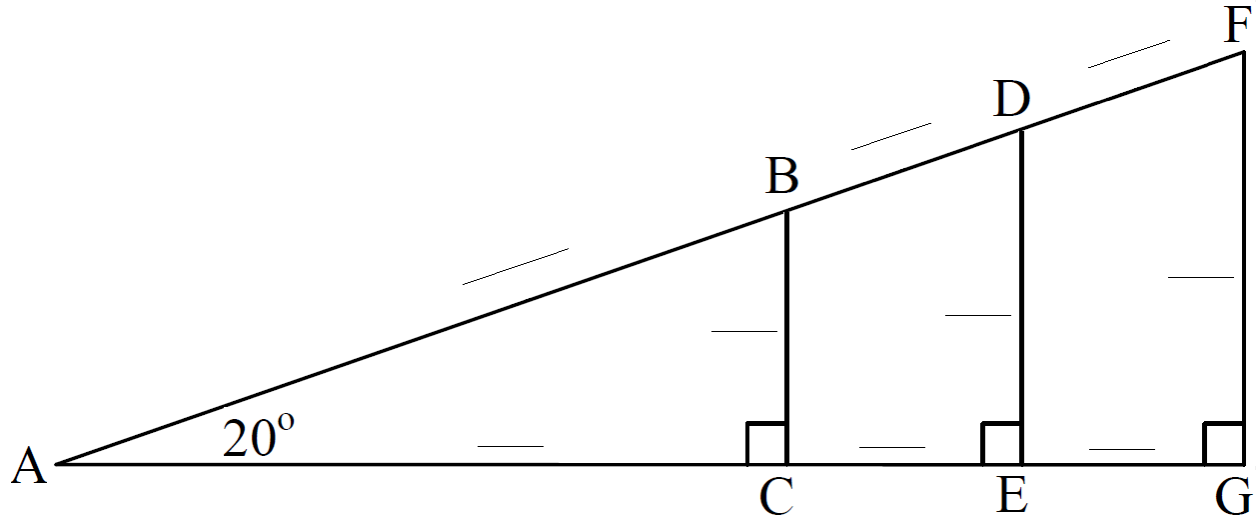
# Similar Triangles

Two **triangles** are said to be **similar** if their corresponding angles are congruent and the corresponding sides are in proportion. In other words, **similar triangles** are the same shape, but not necessarily the same size.

## Part 1

You have been given three similar right-angle triangles;  $\triangle ABC$ ,  $\triangle ADE$ , and  $\triangle AFG$ . All of these triangles share the same base angle of  $20^\circ$ . Measure the sides of the three triangles accurately to the nearest millimeter and record the information in the table below. Calculate the ratios in the last three columns using the measurements you recorded. Round the answers to the nearest hundredths. The first set of measurements and calculations have been completed for you.





Triangle ( $20^\circ$ )	Opposite	Adjacent	Hypotenuse	$\frac{\text{Opposite}}{\text{Hypotenuse}}$	$\frac{\text{Adjacent}}{\text{Hypotenuse}}$	$\frac{\text{Opposite}}{\text{Adjacent}}$
$\triangle ABC$						
$\triangle ADE$						
$\triangle AFG$						

What pattern or patterns to you see?