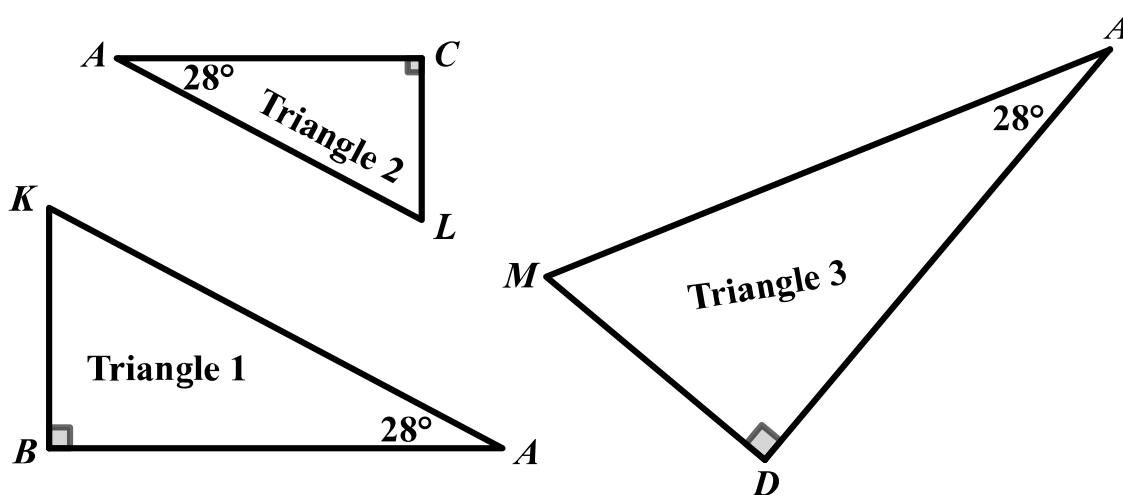


RIGHT TRIANGLE EXPLORATION

Gathering Data

Record your findings to complete the table below.

- Make sure each row contains the corresponding parts of each triangle.
- Identify or calculate the values of the angle measures of each triangle.
- Use a ruler to find the measurement of each side length. Use centimeters.



Triangle 1	Triangle 2	Triangle 3
$m\angle ABK =$ $^{\circ}$	$m\angle \underline{\hspace{1cm}} =$ $^{\circ}$	$m\angle \underline{\hspace{1cm}} =$ $^{\circ}$
$m\angle BKA =$		
$m\angle KAB =$		
$\overline{AB} =$		
$\overline{BK} =$		
$\overline{KA} =$		

Comparing Data

Use your measurements from the previous table to write each ratio below in decimal form.

Ratio 1	Ratio 2	Ratio 3	Ratio 4
$\frac{\overline{AB}}{\overline{KA}} =$	$\frac{\overline{BK}}{\overline{KA}} =$	$\frac{\overline{AB}}{\overline{BK}} =$	$\frac{\overline{BK}}{\overline{AB}} =$
$\frac{\overline{AC}}{\overline{LA}} =$	$\frac{\overline{CL}}{\overline{LA}} =$	$\frac{\overline{AC}}{\overline{CL}} =$	$\frac{\overline{CL}}{\overline{AC}} =$
$\frac{\overline{AD}}{\overline{MA}} =$	$\frac{\overline{DM}}{\overline{MA}} =$	$\frac{\overline{AD}}{\overline{DM}} =$	$\frac{\overline{DM}}{\overline{AD}} =$

Making Observations

What have you observed about these ratios?

Making Predictions

Create a hypothesis about the relationship among the lengths of the sides of the right triangles based on the information that your group gathered and discussed.