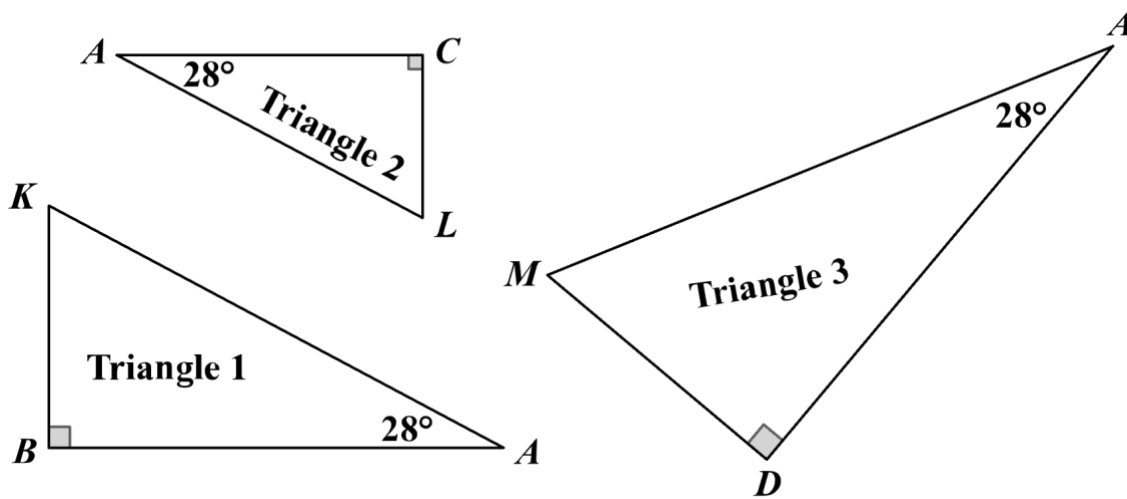# RIGHT TRIANGLE EXPLORATION

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
$m\angle ABK =$ °	$m\angle$ _____ = °	$m\angle$ _____ = °
$m\angle BKA =$		
$m\angle KAB =$		
$\overline{AB} =$		
$\overline{BK} =$		
$\overline{KA} =$		

Comparing Data

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

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

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.