

# Trigonometry Exploration 2b

Now with your Triangle Partner(s), compare the ratios you calculated in the first part of this exercise and come to some agreement on the first 3 decimal values for each value. Record your answers below:

$$a/c =$$

$$b/c =$$

$$a/b =$$

Together with your Triangle Partners, answer the following questions:

1. What determines the shape of a triangle? Explain your answer.
2. What have you noticed about the way the sides of identically-shaped triangles compare to one-another even though they are different sizes?
3. Complete these sentences:

Triangles that are exactly the same shape (\_\_\_\_\_ ) but have different \_\_\_\_\_ are called \_\_\_\_\_. If two triangles are \_\_\_\_\_, then the \_\_\_\_\_ of their corresponding sides will be \_\_\_\_\_.

In trigonometry, we can make use of these relationships to help us find missing information about triangles, provided we have information about a triangle that is \_\_\_\_\_ to the one we are looking at.

