

Pythagorean Relationship – Parts of a Right Triangle

Name: _____

Class: _____

1. Draw a right triangle - a triangle with one right angle (90°)
 - a. Measure the sides of your triangle (in centimetres) to 1 place after the decimal.
 - b. Find the longest side of your triangle. This is called the **hypotenuse**. Label it **c**. It is always opposite the right angle.
 - c. Label the two shorter sides **a** and **b**. these are called the **legs**. It is not important which is **a** and which is **b**.
 - d. Find the angle that is 90° . This is the **right angle**. Label it **C**.
 - e. Find the angle opposite side **a**, and label it **A**
 - f. Find the angle opposite side **b**, and label it **B**.
 - g. What is the sum of angles **A** and **B**?
 - h. Why is the sum of angles **A** and **B** always the same?

2. There is a relationship between the squares of the lengths of the sides of a right triangle that allows us to calculate any one of them if given the other two. Examine your triangle and see what you can find. Keep note of any discoveries you make.