



Review similar triangles and changing fractions to decimals.

Using precision geometry tools and sturdy material such as Tagboard, construct one or more sets of three similar right triangles. Measure the angles to the nearest degree to verify similarity of the right triangles or the demonstration will not work. Measure the lengths of the sides to the nearest 16th of an inch or the nearest millimeter. Write ratios from your models using the corresponding sides of the similar triangles. Change the ratios into decimals. Look for a pattern. Think of one or more practical applications for these ratios.

Share with the class your method of calculating the ratios and illustrate your practical application of these ratios with a model or diagram.

***Extension:*** Use your ratios to figure out a method to discover unknown dimensions or angles of other similar right triangles.