



Problem 1 – Exploring trigonometric ratios

- Using the triangle on page 1.4, find the following ratios and trig values to one decimal place.

Ratio	Value
$\frac{a}{c}$	
$\frac{b}{a}$	
$\frac{b}{c}$	

Trig Function	Value
$\sin(B)$	
$\cos(B)$	
$\tan(B)$	

- Based upon your answers, match each ratio with its correct trigonometric operation.

$$\frac{b}{a} \qquad \sin(B)$$

$$\frac{b}{c} \qquad \tan(B)$$

$$\frac{a}{c} \qquad \cos(B)$$

- Test your hypothesis to see if your chosen relationships holds true. To do this, drag point *A* of each triangle on pages 2.2, 3.1 and 4.1.
- Write the acronym on page 5.1 along with what it means below.

Problem 2 – Exploring Another Triangle

On pages 5.3-5.5, use either sine, cosine, or tangent to find the length of the missing side. Then, verify your answer by measuring the side.

Page	Trig Function	Length of Missing Side
5.3		
5.4		
5.5		

Find the length of AC in each of three triangles. Record your answers on the screenshot below.

