

# Trigonometry

## Right Angle

Label the sides.



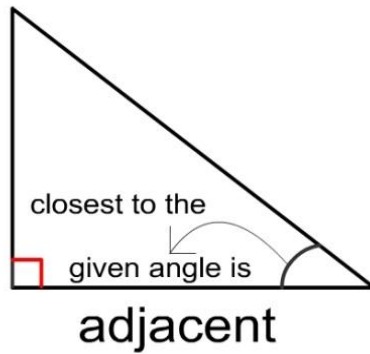
What sides do you have / looking for?



Match sides to formula.



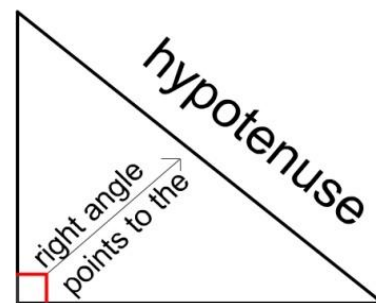
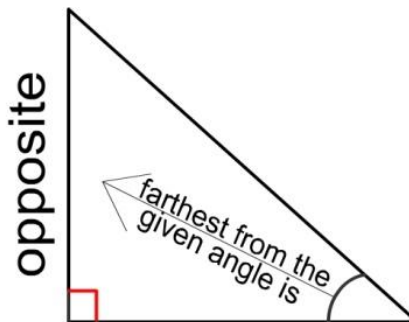
Fill in formula and solve.



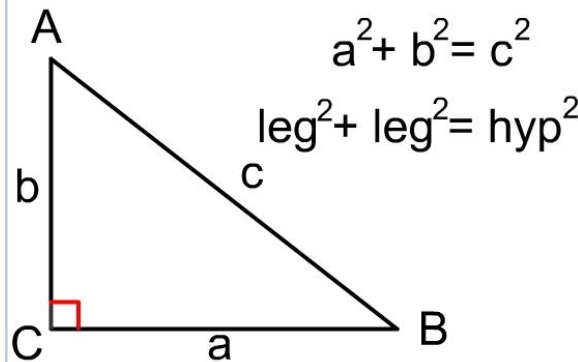
$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}} \quad \csc \theta = \frac{\text{hypotenuse}}{\text{opposite}}$$

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}} \quad \sec \theta = \frac{\text{hypotenuse}}{\text{adjacent}}$$

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}} \quad \cot \theta = \frac{\text{adjacent}}{\text{opposite}}$$



### Pythagorean Theorem



### Triangle TidBits

#### Label a triangle:

Angles of a triangle are labeled with CAPITAL letters.

Sides of a triangle are labeled with lower case letters.

#### Angles of a triangle:

Angles of a triangle always add to  $180^\circ$ .