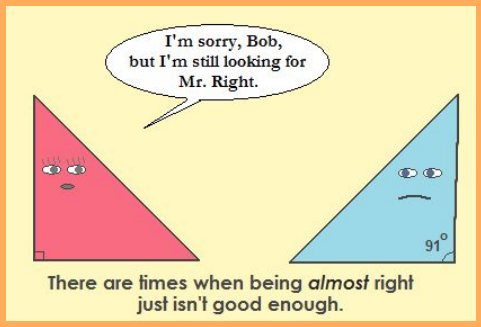
Unit 4

Learning Target 1

I can solve a right triangle.



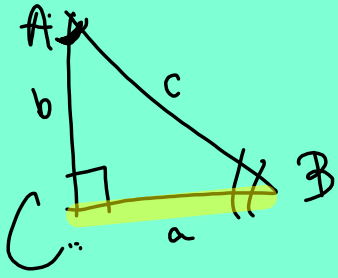
Solving Right Triangles

Solving a triangle means to find **ALL** missing sides and angle measurements.

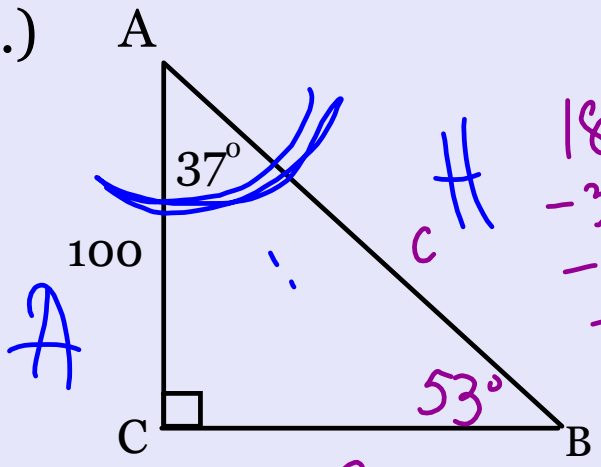
***There will ALWAYS be three missing pieces of information.

$a^2 + b^2 = c^2$ ← Hypotenuse

$S\frac{O}{H}\ C\frac{A}{H}\ T\frac{O}{A}$



1.)



$\angle B = 53°$

$c = 125.21$

$a = 75.35$

180 − 37 − 90

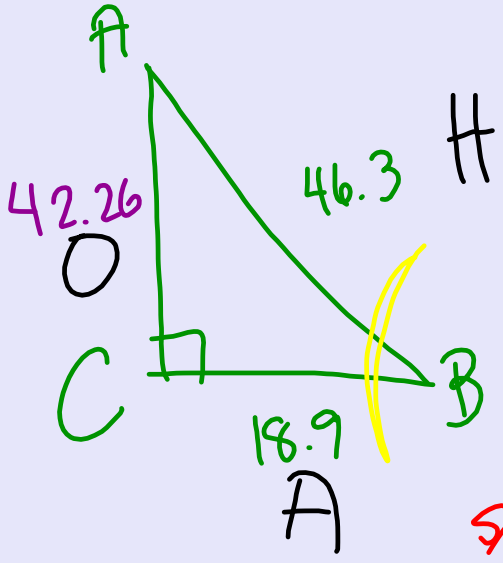
$C_H^A \; T_A^O$

$a^2 + b^2 = c^2$

$75.35^2 + 100^2 = c^2$

$100 \cdot \tan 37° = a$

2.) a = 18.9 c = 46.3 C = 90°



$b = 42.26$

$\angle A = 24.12°$

$\angle B = 65.88°$

$18.9^2 + b^2 = 46.3^2$

$b^2 = \sqrt{46.3^2 - 18.9^2}$

$\sin B = \frac{42.26}{46.3}$

$B = 65.88°$