**Metric Relations in a Right Triangle**

There are 3 similar triangles in the illustration above. Can you name them and draw them?

A

B

D

D

A

C

A

B

C

**Because there are 3 similar triangles, we can find just about any missing measure in a figure like the one below.**

b

h

a

n

m

c

**Instead of using proportions to solve, we will use four simple formulas:**

**a2 = m\*c**

**b2 = n\*c**

**h2 = m\*n**

**a\*b = h\*c**

**AND because it’s a right triangle, we can also use Pythagoras!**

**a2 + b2 = c2**

Ex. Find the missing measures

9

12

 c

h

m

n