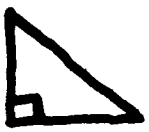
Classifying Δ's (sheet #1)

We can classify Δ's according to their angle sizes

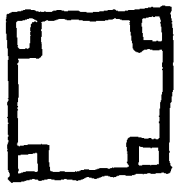
an **Acute Δ** - is a Δ where all of its interior angles are Less than 90° (called acute angles Less than 90°)

an **Obtuse Δ** - is a Δ where 1 angle is greater than 90° (and the other 2 angles are acute)

a **Right Δ** - is a Δ where 1 angle is exactly 90° (ie) 

Classifying Δ's (continued) (Sheet #2)

* ALL angles in a Δ = 180° (no matter what kind of Δ it is)

- this is because a square has 4 (90°) angles on it's interior (ie.)  and 4 × 90 = 360° or all the way around 1 plane

(Like a circle 

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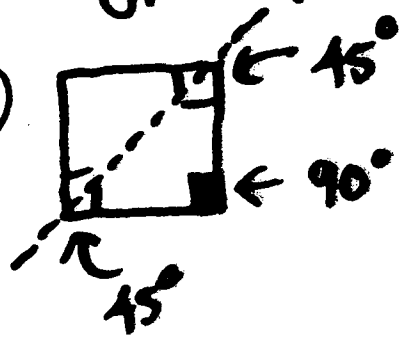
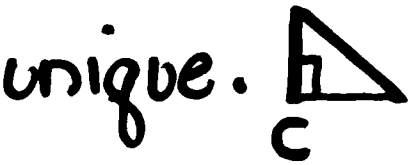
- If a square measures 360° all the way around, then typically - any Δ cuts a square into 1 half

(ie.) 

45° + 90° + 45° = 180° (or ½(360)

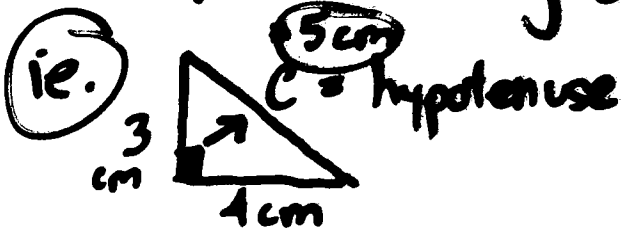
Classifying Δ's (Sheet #3)

Right triangles are considered unique. 

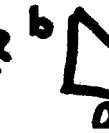
* The right angle of a right angle Δ is always labelled "C" (upper case-c) or capital "C".

- angles are always represented as upper case A, B, or C.
- Sides are always represented as Lower case a, b, or c.

In a right Δ, the side opposite the right angle "C" is known as the Hypotenuse and this is always the Longest side of a right Δ.

ie. 

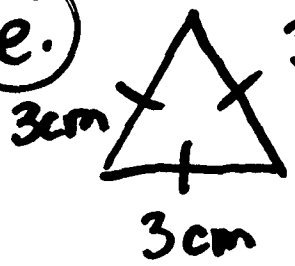
Once we Locate the hypotenuse & Label it "c", it does not matter which of the other 2 sides are labelled "a" or "b" ie. 

OR 

* both ok!

Classifying Δ's (Last sheet ! ☺) sheet #1

Equilateral Δ's - are Δ's where all 3 sides are equal (ie.)



Isosceles Δ's - are Δ's with 2 equal sides

(ie.)

Scalene Δ's - are Δ's with NO equal sides

(ie.)

The formula for calculating the area of a Δ is: $A = \frac{1}{2}(\text{base} \times \text{height})$ or $A = \frac{(\text{base} \times \text{height})}{2}$

(ie.)

$A = \frac{(b \times h)}{2}$ $A = \frac{(10^{cm} \times 5^{cm})}{2}$ $A = 25\ cm^2$

Circumference of a Circle

$$C = \pi(D) \quad \text{OR} \quad C = \pi(2r)$$

to represent the formula in terms of D - diameter, use algebra to move $\pi(Pi)$ so D is "isolated"

(ie)

$$C = \pi(D)$$

$$\frac{C}{\pi} = \frac{\pi(D)}{\pi}$$

To isolate (D), divide both sides by π

so $\frac{C}{\pi} = D$ then diameter = $\frac{\text{Circumference}}{Pi}$

to represent the formula in terms of π or Pi, move (D) so π is "isolated" or all alone on 1 side of the equal sign.

(ie)

$$C = \pi(D)$$

$$\frac{C}{(D)} = \frac{\pi(D)}{(D)}$$

so $\frac{C}{D} = \pi$ then $Pi = \frac{\text{Circumference}}{\text{Diameter}}$