Strand: **Algebra**   **Name:**_____

Skill Addressed: Understanding Ratio   **Blk: ___**
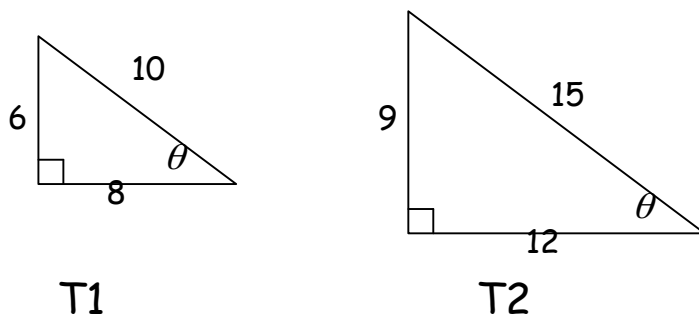
Activity: *Trigonometric Ratios*

More Ratios:

Sine, Cosine and Tangent [AKA sin, cos, tan] of an angle – usually Theta [θ] are also ratios – they are called Trig Ratios… $\sin\theta$, $\cos\theta$, $\tan\theta$.

It's important for you to know that they are *ratios of **sides** of triangles*.

So, the *lengths of the sides of triangle* are of ultimate importance – they make up the trig ratio!

If the same-shaped triangle is expanded to make a larger one, these triangles are called similar because their angles are the same. Here, the large one is a dilatation of the smaller one.

For Example: If you and your friend have the exact same triangle picture on your iPads and you ***zoom in*** on one of them, they are still the same shape, so they are similar triangles.

Consider the two triangles above:

Triangle T1	Triangle T2
$\sin\theta$ =	$\sin\theta$ =
$\cos\theta$ =	$\cos\theta$ =
$\tan\theta$ =	$\tan\theta$ =

Carefully explain what you notice! _____

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