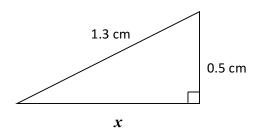
Set your calculator to **DEGREE mode

1. Pythagorean Theorem. Draw a right triangle. Label the sides a, b and c (c must be the longest side). Side c is called the ______.

Now draw a square on each side of the triangle. State the relationship between the squares on the sides of the right triangle.

Ex. 1 Determine the length of the indicated side.



Ex. 2 Brad walks 1.7 km North and then 1.5 km East along the sides of a park. Dan starts at the same point and takes a shortcut along the diagonal. How much shorter is Dan's walk?

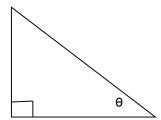
2. Solving Equations.

Ex. 1 Solve for x to the nearest tenth.

a)
$$\frac{12}{x} = \frac{20}{3}$$

b)
$$\frac{6.7}{2.8} = \frac{x}{4.2}$$

3. Primary Trig Ratios. Given a right triangle with angle θ (theta), label the sides "hypotenuse", side "opposite" to angle θ , and side "adjacent" to angle θ .



To remember the 3 primary trig. ratios of the sides of a right triangle relative to angle θ use _____

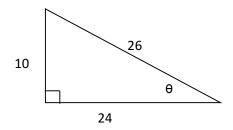
The 3 primary trig ratios are:

sine θ =

cosine θ =

tangent θ =

Ex. 1 Write the 3 primary trig ratios relative to θ .



Ex. 2 Evaluate to four decimal places.

a)
$$\sin 54 =$$

b)
$$\cos 14 =$$

c)
$$tan 61 =$$

U2D1 Practice: Pg 72 # 4 - 7, 9, 10 ab Check Answers: Pg. 540