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NOTE: Notes will NOT be allowed for quiz/test. You will have a copy of the reference sheet attached
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**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 $\qquad$ .

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

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 $\theta$ (theta), label the sides "hypotenuse", side "opposite" to angle $\theta$, and side "adjacent" to angle $\theta$.


To remember the 3 primary trig. ratios of the sides of a right triangle relative to angle $\theta$ use $\qquad$ The 3 primary trig ratios are:
$\operatorname{sine} \theta=$
$\operatorname{cosine} \theta=$
tangent $\theta=$

Ex. 1 Write the 3 primary trig ratios relative to $\theta$.


Ex. 2 Evaluate to four decimal places.
a) $\sin 54=$
b) $\cos 14=$
c) $\tan 61=$

