Math 10C Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Trigonometry Notes

**Pythagorean Theorem**

In a right triangle the square of the **hypotenuse** longest side is equal to the sum of the square of the other two sides.

The formula is:

The **hypotenuse** of a right triangle is always the side opposite the right angle. It is the **longest** side in a right triangle.

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1. When working with the Pythagorean Theorem, we are always finding the length of **one** side.

If you are looking for the HYPOTENUSE use the formula:

For ANY other side, use the formula:

1.  For trigonometry, we need to not only identify the hypotenuse but which side is OPPOSITE the angle being studied and which side is ADJACENT.

The **opposite side** is across from a given angle. **Adjacent** is the whatever side is left.

In trigonometry, we **MUST** be given at least one angle and one side and we’re asked to find another side **OR** we’re given two sides and we’re asked to find an angle. Both situations require a different method of calculation.

First, you MUST know the trigonometry rations:

**SOH CAH TOA**