

Chapter 8 Review

CA Standards: 15, 18, 19, 20 - Pythagorean Theorem, Sin/Cos/Tan

Be able to:

1) calculate $a^2 + b^2 = c^2$; solve for a, b or c given two sides

2) calculate whether a triangle is: acute, right or obtuse

$a^2 + b^2 > c^2$ acute triangle

$a^2 + b^2 = c^2$ right triangle

$a^2 + b^2 < c^2$ obtuse triangle

3) calculate the sides of a 45-45-90 triangle, (1 - 1 - radical 2)

calculate the sides of a 30-60-90 triangle, (1 - radical 3 - 2)

4) show the sin/cos/tan ratios given a triangle

5) calculate the sin/cos/tan using a triangle and two given "pieces" of it

6) calculate the angles of elevation/depression using sin/cos/tan

When a hypotenuse is given, use sin or cos! When no hypotenuse is given, use only tangent!

Vocabulary: angle of depression, angle of elevation, cosine, sine, tangent, Pythagorean Theorem

Remember: the longest side of a right triangle is the hypotenuse (opposite the right angle, and is labeled "c".)

The other two legs are labeled as "a", or "b".