

Chapter 9 Test Prep

1. Given two sides of a right triangle, find the third side.
 - a. Use Pythagorean Theorem or use Triples
2. Given a right triangle with all 3 sides, represent any trig ratio of an acute angle using the sides.
3. Find the EXACT values for sine, cosine, and/or tangent ratios of a 30° , 60° , and/or 45° angle
4. Given three sides of a triangle, classify the triangle as acute, right or obtuse.
5. Given two sides of a right triangle, find one or both of the acute angle measures (this is inverse trig ratios)
6. Given one side of a right triangle and an acute angle measure, find one or both of the remaining sides. (this is “SOH-CAH-TOA” ratios)
7. “word problems” using angles of elevation/depression
8. Review the following terms, you may need to use them to create diagrams to do any of the above...
 - a. Midsegments
 - b. Medians
 - c. Perpendicular bisectors
 - d. Angle bisectors
 - e. Altitudes
9. Derive the Law of Sines and the Law of Cosines formula (*links to YouTube videos of these proofs are on the calendar! Look under that day's lesson objective*)
10. Solve non-right triangles
 - a. Be sure to know which Law to use with the given information!
 - i. Law of Sines
 1. ASA, AAS, or SSA cases
 - ii. Law of Cosines
 1. SAS or SSS cases
11. Find the area of a triangle using the formula $\frac{ab \sin C}{2}$