

Trigonometry Course Competencies:

1. Define terminology used with angles.
2. Use algebra skills to solve equations.
3. Demonstrate knowledge of the Pythagorean Theorem.
4. Demonstrate knowledge of the relationship of 30-60-90 and 45-45-90 right triangles.
5. Graph trigonometric and algebraic functions in the Cartesian plane.
6. Find the distance between two points.
7. Compute coterminal angles.
8. Put an angle in standard position in the coordinate system.
9. Define the six basic trigonometric functions.
10. Know the signs of the functions in all four quadrants.
11. Calculate all functions of an angle given a point on the terminal side of an angle.
12. Demonstrate knowledge of the reciprocal relationships.
13. Demonstrate knowledge of the ratio identities.
14. Demonstrate knowledge of the Pythagorean identities.
15. Prove identities using the basic relationships.
16. List the trigonometric functions as ratios of the sides of a right triangle.
17. Calculate complementary functions.
18. Solve right and non right triangles using trigonometric ratios, law of sines, and law of cosines.
19. Solve application problems involving vectors.
20. Operate a calculator to determine functions and inverses.
21. Convert from a decimal degree to degrees minutes and seconds and vice versa.
22. Compute reference angles.
23. Manipulate complex numbers and perform operations on complex numbers.
24. Graph polar coordinates.
25. Convert coordinates from polar to rectangular and vice versa.