Algebra 2
Unit: Trigonometric Functions
Section: Trigonometric Values in All Four Quadrants

Example: Finding Cosine and Sine in Quadrant I

Problem

Find the point P cosine of thirty degrees, sine of thirty degrees on the unit circle.

Solution

Draw the special right triangle thirty, sixty, ninety. This has legs with lengths equals to 1 and square root of 3 and hypotenuse equal to 2.

Solve for cosine and sine. Cosine of thirty degrees is square root of three divided by two. Sine of thirty degrees is one-half.