# Introduction to Trigonometry Objectives

# **Right Triangle Trigonometry Lesson**

Identify trigonometric ratios on a given right triangle

Apply trigonometric ratios to find missing side lengths of right triangles

Use complementary angles to demonstrate the relationship between a trigonometric function and its cofunction

# Solving Right Triangles Lesson

Apply trigonometric ratios to find all missing sides and angles of a right triangle

#### **Angle Measurements Lessson**

Differentiate between degree and radian measures

Convert angle measurements between degrees and radians

Use the concept of arc length to develop the relationship between degree and radian measures

#### The Unit Circle Lesson

Identify the standard position of an angle on the coordinate plane

Use the unit circle and right triangles to define and evaluate trigonometric functions of real numbers

# **Special Right Triangles Lesson**

Identify relationships of side lengths in special triangles

Develop the values of trigonometric functions at special angles in both radians and degrees

# Trigonometric Functions in Quadrants I–IV Lesson

Identify the reference angle of an angle in standard position on the unit circle

Identify the relationship between the values of trigonometric functions in each quadrant of the unit circle

Evaluate trigonometric functions of quadrantal angles in any position

