

## Unit 2

### Topics

Calculators will be used extensively in this unit as we review and learn about the following topics:

- Conversions between radians, (decimal) degrees, and degrees-minutes-seconds (6.1)
  - Applications: connection between radians and lengths of arcs
  - Circular motion (6.1 and [supplementary material](#))
  - Evaluation of trigonometric functions with a calculator (make sure your calculator is set to the correct mode!) (6.2)
  - Evaluation of trigonometric functions using a triangle (8.1)
  - Solving right triangles, including applications (8.1)
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### Study Guidelines for the 8th edition of Sullivan's *Precalculus*

These reading and problem assignments are designed to help you learn the course material.

The only way to learn mathematics is to do mathematics, so while these problems will not be collected or graded, you will probably not do well in the course if you do not complete these and check your work as described above.

#### Section 6.1: Angles and Their Measure

- **Reading:** section 6.1, pages 347-348 and 350-353  
Read and work through example 3 and examples 6-8 and their corresponding matched problems.  
Read the [supplementary material on circular motion](#), and work through the [examples](#).
- **Practice Problems:**
  - 6.1 #23-33 odd, 59-111 odd
  - Circular Motion: [problems #1-4](#) (solutions are included)
- **Section 6.2:** Trigonometric Functions: Unit Circle Approach
- **Section 8.1:** Applications Involving Right Triangles