

Precalculus

Right Triangle Trigonometry

The list below contains the specific *learning targets* for the unit on right triangle trigonometry. Before the unit test, you should be able to place a check next to each statement as being true.

- I can define radian measure in terms of a central angle and arc length.
- I can convert angle measures between degrees and radians.
- I can evaluate trigonometric ratios for any angle.
- I can define the six trigonometric functions in the coordinate plane using the unit circle.
- I can identify and use the reciprocal, quotient, and Pythagorean identities for trigonometric functions
- I can solve problems involving arc length.
- I can solve problems involving trigonometric ratios.
- I can solve problems involving linear and angular speed.

Textbook Assignments

The exercises below are from *Precalculus: A Graphing Approach* by Hungerford, Jovell, and Mayberry. These specific problems are the bare minimum that should be completed after each lesson, but you are encouraged to attempt more if needed.

- 6.1 Right Triangle Trigonometry **pg 419: 11, 17, 19, 21, 23, 25, 39, 41**
- 6.2 Trigonometric Applications **pg 429: 1, 5, 7, 11, 19, 21, 25, 27, 29**
- 6.2 Trigonometric Applications **pg 429: 37, 41, 43, 46, 50, 51, 55**
- 6.3 Radians and Angle Measure **pg 441: 7, 19, 27, 35, 37, 49, 53, 55, 57, 63**
- 6.3 Radians and Angle Measure **pg 441: 65, 67, 69, 77, 78, 79, 84**
- 6.4 Radians and Angle Measure **pg 452: 5, 7, 31-53 (odd), 55**
- 6.5 Basic Trigonometric Identities **pg 460: 1-8, 13, 16, 19, 21, 23**

Assignments are subject to change in class.