

## Trig Ratios of Any Angle

Students should be able to:

- Draw an angle between  $0$  and  $360^\circ$  in standard position
- Determine a reference angle for an angle in standard position
- Refer to the quadrants I, II, III and IV
- Draw an angle in standard position given the quadrant and the reference angle
- Use special triangles to get exact trig ratios for  $30^\circ$ ,  $45^\circ$ , and  $60^\circ$  angles.
- Calculate the primary trig ratios of angles between  $0^\circ$  and  $360^\circ$  in standard position
- Determine an angle in standard position given the trigonometric ratio and the quadrant of the terminal arm
- Determine an angle in standard position given a point on the terminal arm.
- Determine the value of the 4 quadrantal angles.
- Solve problems involving trig ratios and angles between  $0^\circ$  and  $360^\circ$

Resources which may be helpful:

- Textbook: Pg 77-99
- MathBitsNotebook:  
<http://mathbitsnotebook.com/Algebra2/TrigConcepts/TCStandardPosition.html>
- Online Note: <http://www.dpcdsb.org/NR/rdonlyres/0436904B-E4B3-4B0C-8E78-BBF5497B9229/30694/52TrigonometricRatiosforAnyAngle.pdf>
- Martensmath: 2.1-2.2 <https://www.youtube.com/watch?v=MtNcd0jNZPw&list=PLDUqt1yELCjx9XbJrD1qI60JSSAh-BI5&index=2>

Example Assessment:

- <http://math11.mrnelson.ca/trigraex.pdf>