## Trig Values on the Unit Circle

*Trig values for the other quadrants can be easily derived from their first-quadrant values.
*To use these values, you must determine the reference angles for each angle measurement in the other quadrants. A reference angle is an angle created by the terminal side of an angle and the x-axis as the other side. From the reference angle, you can determine the equivalent angle in the first quadrant and then assign the $+/-$ sign associated with the function in that quadrant.
*Here are the signs associated with the different functions in each of the four quadrants.
Quadrant 1: Sine, cosine, and tangent are all positive
Quadrant 2: Sine is positive; cosine and tangent are negative.
Quadrant 3: Sine and cosine are negative; tangent is positive.
Quadrant 4: Sine and tangent are negative; cosine is positive.

