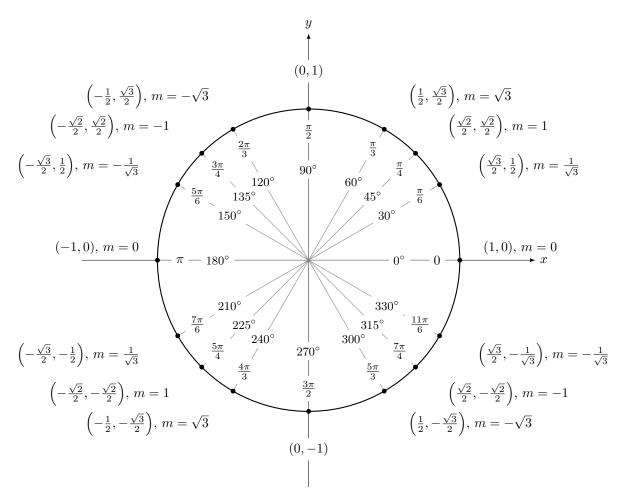
# The Unit Circle

## Prof. Steven Clontz

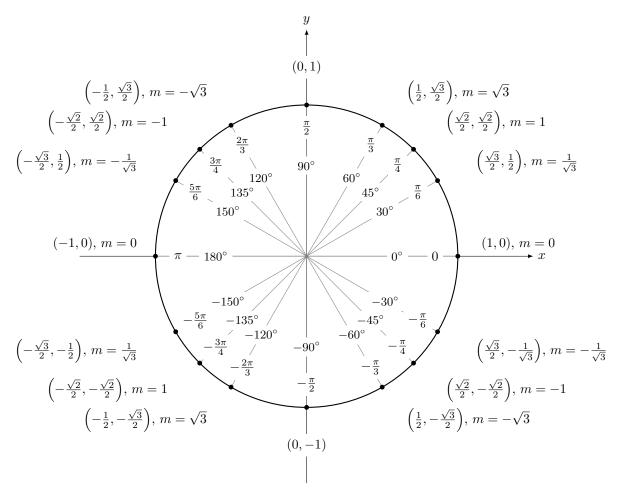
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Adapted from the original by Supreme Aryal at http://www.texample.net/tikz/examples/unit-circle/ Licensed under https://creativecommons.org/licenses/by/2.5/ http://clontz.org



#### How to Use

- The unit circle traces the points (x,y) satisfying  $x^2 + y^2 = 1$  by letting  $x = \cos \theta$  and  $y = \sin \theta$  for  $0 < \theta < 2\pi$ .
- The slope m of the non-vertical lines from the origin to each point is given by  $m = \frac{y}{x} = \tan \theta$ .



#### How to Use

- The unit circle traces the points (x,y) satisfying  $x^2+y^2=1$  by letting  $x=\cos\theta$  and  $y=\sin\theta$  for  $-\pi\leq\theta\leq\pi$ .
- The slope m of the non-vertical lines from the origin to each point is given by  $m = \frac{y}{x} = \tan \theta$ .