

The Unit Circle: Sines and Cosines

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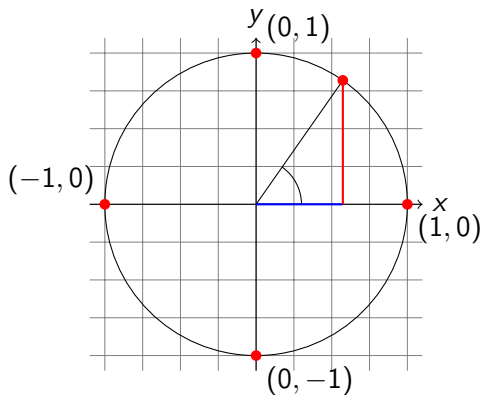
Announcements

- 1 Homework in MyOpenMath!
- 2 Office hours, 10am - 11am.

The Unit Circle

Definitions

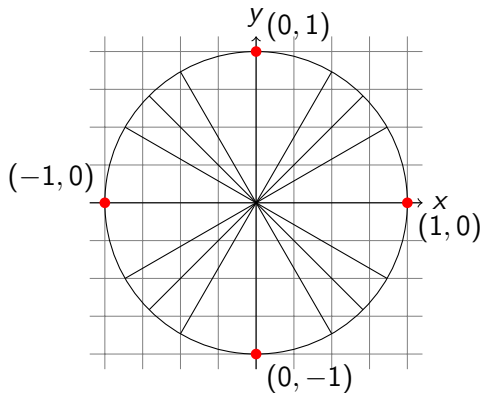
- Unit Circle



The Unit Circle

Definitions

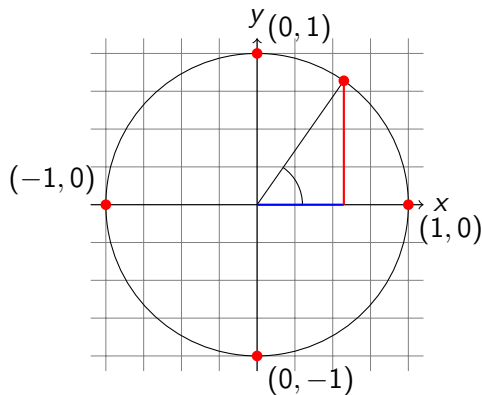
If θ is an angle measure and (x, y) is the point on the unit circle corresponding to an angle of θ , then



The Pythagorean Identity

Definitions

- Pythagorean identity



Example

Suppose $0 \leq \theta \leq \pi/2$ and $\sin(\theta) = \frac{3}{5}$. What is $\cos(\theta)$?

Example

Suppose $\pi \leq \theta \leq \frac{3\pi}{2}$ and $\cos(\theta) = -\frac{1}{8}$. What is $\sin(\theta)$?