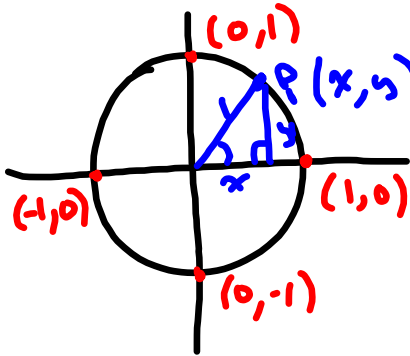


5.3 Unit Circle

Unit Circle \rightarrow Circle w/ radius = 1



$$P(x,y) \rightarrow P(\cos \theta, \sin \theta)$$

$$\sin \theta = \frac{y}{1} \quad \cos \theta = \frac{x}{1} \quad \left[\begin{array}{l} \tan \theta = \frac{y}{x} \\ \cot \theta = \frac{x}{y} \end{array} \right.$$

$$\left[\begin{array}{l} \sin \theta = y \\ \csc \theta = \frac{1}{y} \end{array} \right. \left[\begin{array}{l} \cos \theta = x \\ \sec \theta = \frac{1}{x} \end{array} \right.$$

Ex $\cos 270^\circ = 0$ $\sin(-90^\circ) = -1$ $\cot(-180^\circ) = \frac{-1}{0}$
undefined

