

Let  $\theta$  be an angle of the unit circle and  $(x,y)$  be the point on the unit circle corresponding to  $\theta$ , then...

$$\sin \theta = y \quad \csc \theta = \frac{1}{y} \quad y \neq 0 \quad \text{reciprocal of } y$$

$$\cos \theta = x \quad \sec \theta = \frac{1}{x} \quad x \neq 0 \quad \text{reciprocal of } x$$

$$\tan \theta = \frac{y}{x} \quad x \neq 0 \quad \cot \theta = \frac{x}{y} \quad y \neq 0 \quad \text{reciprocal of } \tan \theta$$

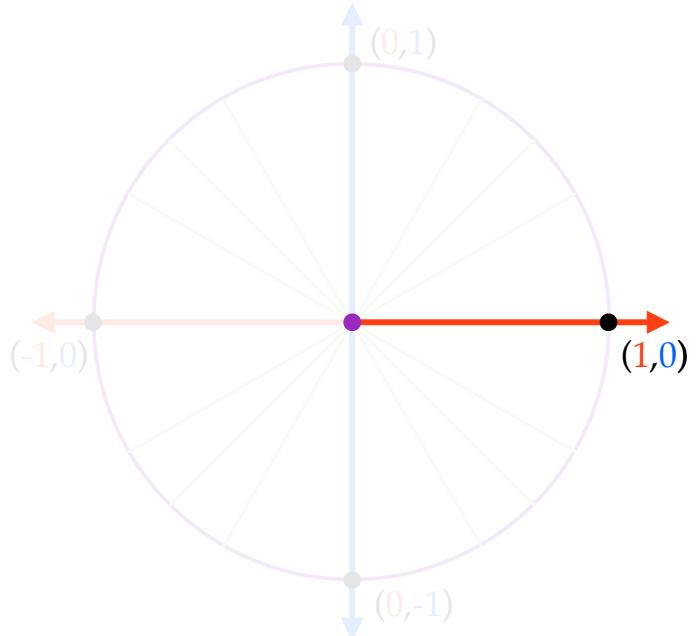
Evaluate the six trigonometric values of the following angles

$$\theta = 0 = 0^\circ$$

$$\sin \theta = y \quad \csc \theta = \frac{1}{y}$$

$$\cos \theta = x \quad \sec \theta = \frac{1}{x}$$

$$\tan \theta = \frac{y}{x} \quad \cot \theta = \frac{x}{y}$$



Evaluate the six trigonometric values  
of the following angles

$$\theta = \frac{\pi}{2} = 90^\circ$$

$$\sin \theta = y$$

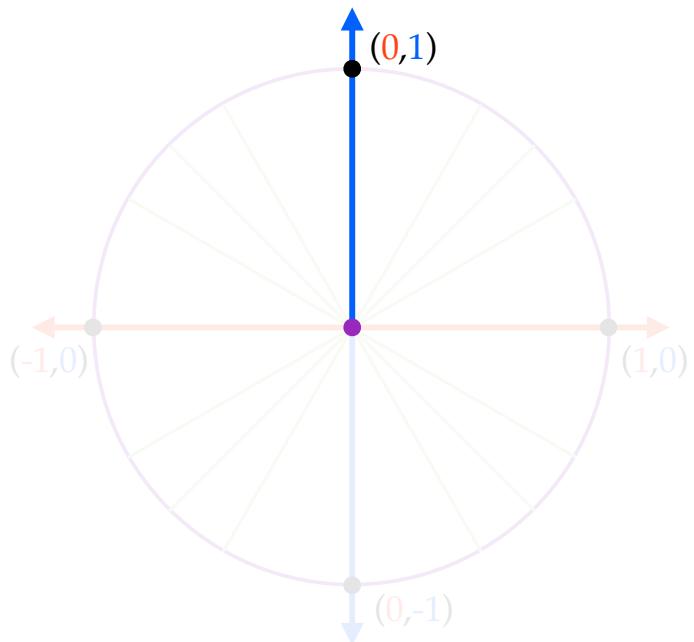
$$\csc \theta = \frac{1}{y}$$

$$\cos \theta = x$$

$$\sec \theta = \frac{1}{x}$$

$$\tan \theta = \frac{y}{x}$$

$$\cot \theta = \frac{x}{y}$$



Evaluate the six trigonometric values  
of the following angles

$$\theta = \pi = 180^\circ \quad (-1, 0)$$

$$\sin \theta = y$$

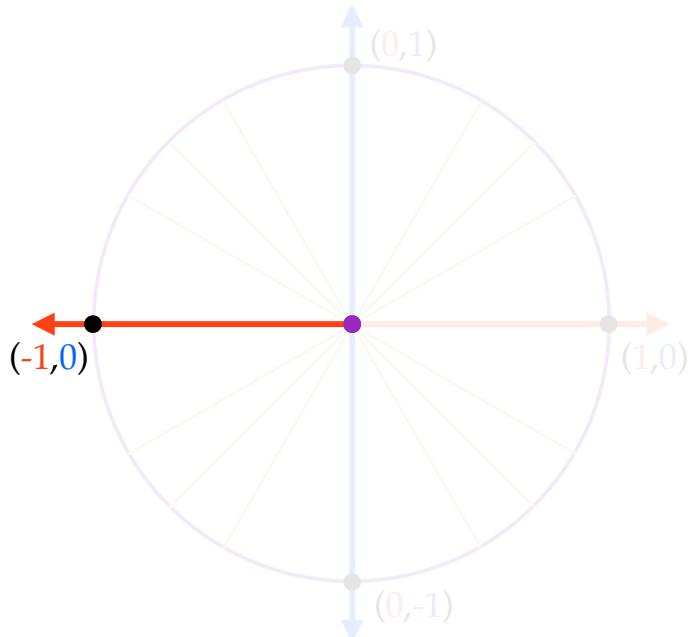
$$\csc \theta = \frac{1}{y}$$

$$\cos \theta = x$$

$$\sec \theta = \frac{1}{x}$$

$$\tan \theta = \frac{y}{x}$$

$$\cot \theta = \frac{x}{y}$$



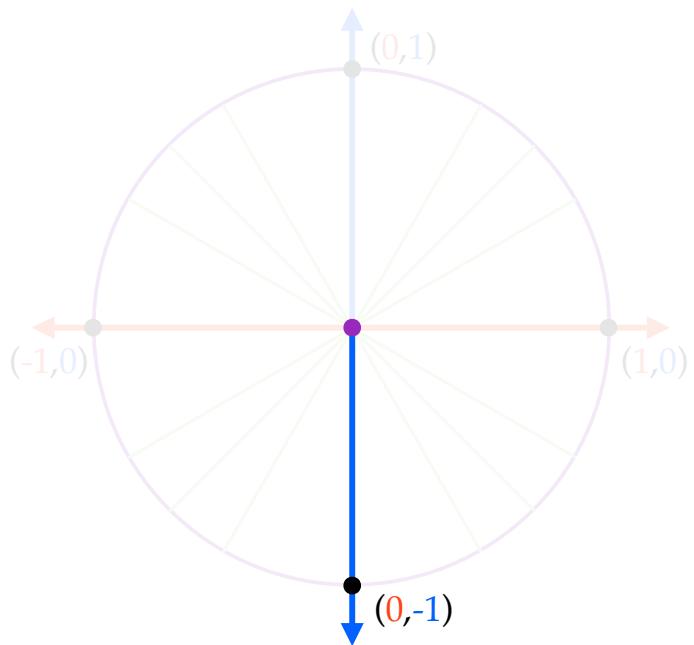
Evaluate the six trigonometric values  
of the following angles

$$\theta = \frac{3\pi}{2} = 270^\circ$$

$$\sin \theta = y \quad \csc \theta = \frac{1}{y}$$

$$\cos \theta = x \quad \sec \theta = \frac{1}{x}$$

$$\tan \theta = \frac{y}{x} \quad \cot \theta = \frac{x}{y}$$



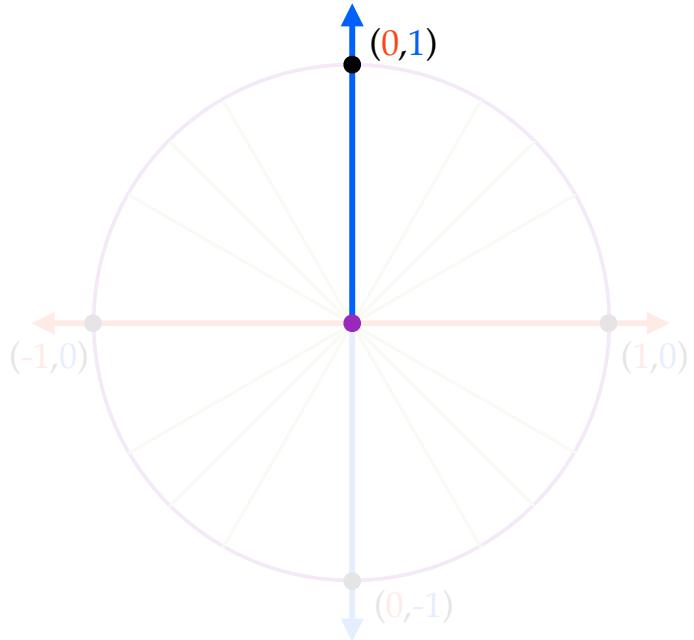
Evaluate the six trigonometric values  
of the following angles

$$\theta = -\frac{3\pi}{2} = -270^\circ$$

$$\sin \theta = y \quad \csc \theta = \frac{1}{y}$$

$$\cos \theta = x \quad \sec \theta = \frac{1}{x}$$

$$\tan \theta = \frac{y}{x} \quad \cot \theta = \frac{x}{y}$$



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$$\cos \theta = x \quad \sec \theta = \frac{1}{x} \quad x \neq 0 \quad \text{reciprocal of } x$$

$$\tan \theta = \frac{y}{x} \quad x \neq 0 \quad \cot \theta = \frac{x}{y} \quad y \neq 0 \quad \text{reciprocal of } \tan \theta$$