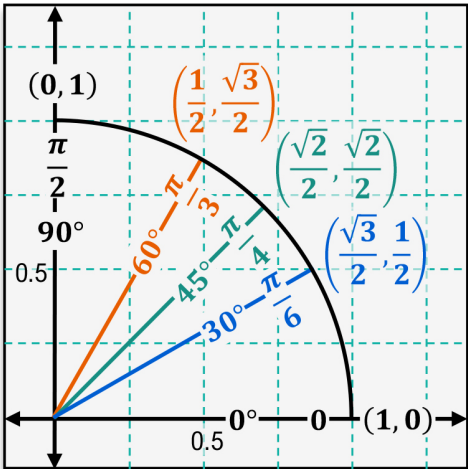


TOPIC: RECIPROCAL TRIG FUNCTIONS ON THE UNIT CIRCLE

Cosecant, Secant, & Cotangent on the Unit Circle

- ◆ Recall: Besides Sine, Cosine, & Tangent, there are 3 other trig functions: Cosecant, Secant, & Cotangent.
 - These are the reciprocal trig functions, so find them by taking the reciprocal of sin, cos, & tan values on the unit circle.

Recall	SIN, COS, & TAN	New	SEC, CSC, & COT
	$\sin \theta = y$ $\cos \theta = x$ $\tan \theta = \frac{\sin \theta}{\cos \theta} = \frac{y}{x}$		$\csc \theta = \frac{1}{\sin \theta} = \frac{1}{y}$ $\sec \theta = \frac{1}{\cos \theta} = \frac{1}{x}$ $\cot \theta = \frac{1}{\tan \theta} = \frac{y}{x}$



EXAMPLE Evaluate each expression.

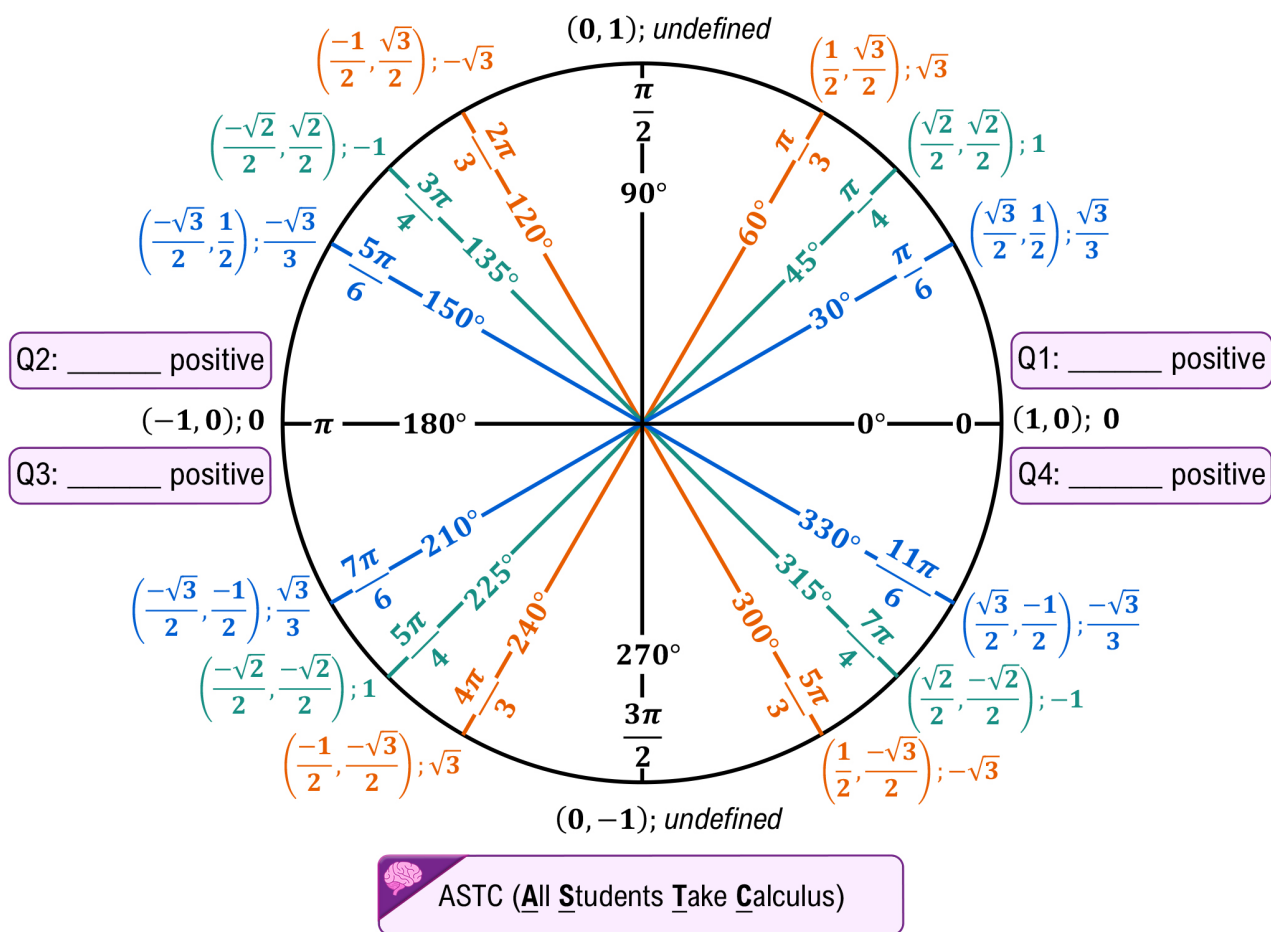
- (A) $\csc \frac{\pi}{6}$
- (B) $\cot \frac{\pi}{4}$
- (C) $\sec 0$

PRACTICE Evaluate each expression.

- (A) $\cot \frac{11\pi}{6}$
- (B) $\csc 225^\circ$
- (C) $\sec \frac{\pi}{3}$

CHAPTER RESOURCE

The Unit Circle: Filled In



CHAPTER RESOURCE

The Unit Circle: Blank

