1.6 Trigonometry

Objectives:

- I know and can use the unit circle

- I can find the exact value of a trig functions

Reciprocal Identities:

$\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$

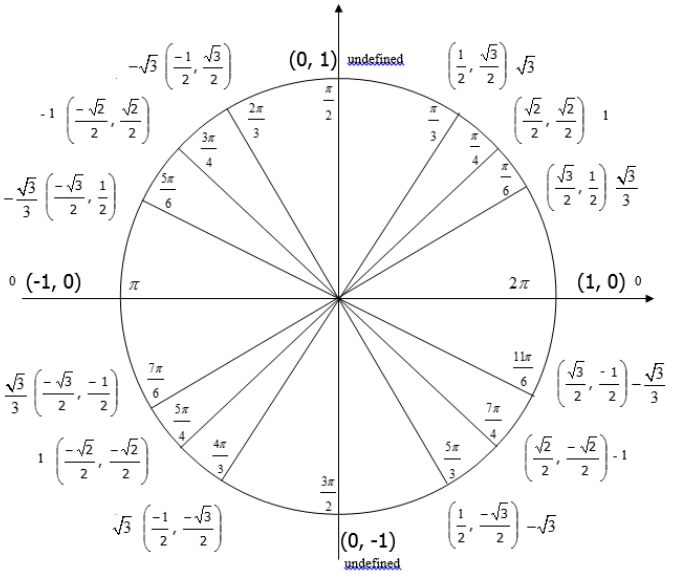
Quotient Identities

$\tan\theta =$ $\cot\theta =$

1.6

Finding Exact Values

Fill out the unit circle!!!



Find the exact value of the following

1. $\sin\frac{\pi}{4}$

2. $\cos\frac{2\pi}{3}$

3. $\tan\left(-\frac{5\pi}{4}\right)$

4. $\csc\left(-\frac{\pi}{6}\right)$

5. $\sec\left(\frac{4\pi}{3}\right)$

6. $\cot 3\pi$

Find the exact value

7. $\theta = \sin^{-1}\frac{1}{2} \qquad -\frac{\pi}{2} \le \theta \le \frac{\pi}{2}$

8. $\theta = \cos^{-1}\left(-\frac{\sqrt{3}}{2}\right) \qquad 0 \le \theta \le \pi$

9. $\theta = \tan^{-1}\sqrt{3} \qquad -\frac{\pi}{2} \le \theta \le \frac{\pi}{2}$