



Trigonometry Identities - Pythagorean (Tan² and Sec²) to Identity (Radians)

1

Complete the pythagorean trig identity for this expression

$$\tan^2\left(\frac{\pi}{6}\right)$$

A	B
$= \sec^2\left(\frac{\pi}{6}\right) - 1$	$= 1 - \sec^2\left(\frac{\pi}{6}\right)$

2

Complete the pythagorean trig identity for this expression

$$\tan^2\left(\frac{7\pi}{6}\right)$$

A	B
$= \csc^2\left(\frac{7\pi}{6}\right) - 1$	$= \sec^2\left(\frac{7\pi}{6}\right) - 1$

3

Complete the pythagorean trig identity for this expression

$$\sec^2\left(\frac{7\pi}{6}\right)$$

A	B
$= 1 - \tan^2\left(\frac{7\pi}{6}\right)$	$= \tan^2\left(\frac{7\pi}{6}\right) + 1$

4

Complete the pythagorean trig identity for this expression

$$\tan^2\left(\frac{5\pi}{3}\right)$$

A	B
$= \csc^2\left(\frac{5\pi}{3}\right) - 1$	$= \sec^2\left(\frac{5\pi}{3}\right) - 1$

5

Complete the pythagorean trig identity for this expression

$$\sec^2\left(\frac{2\pi}{3}\right)$$

A	B
$= \tan^2\left(\frac{2\pi}{3}\right) + 1$	$= 1 - \tan^2\left(\frac{2\pi}{3}\right)$

6

Complete the pythagorean trig identity for this expression

$$\tan^2\left(\frac{4\pi}{3}\right)$$

A	B
$= \sec^2\left(\frac{4\pi}{3}\right) - 1$	$= \csc^2\left(\frac{4\pi}{3}\right) - 1$

7

Complete the pythagorean trig identity for this expression

$$\tan^2\left(\frac{3\pi}{4}\right)$$

A	B
$= \csc^2\left(\frac{3\pi}{4}\right) - 1$	$= \sec^2\left(\frac{3\pi}{4}\right) - 1$

8

Complete the pythagorean trig identity for this expression

$$\sec^2\left(\frac{7\pi}{4}\right)$$

A	B
$= 1 - \tan^2\left(\frac{7\pi}{4}\right)$	$= \tan^2\left(\frac{7\pi}{4}\right) + 1$