



Trigonometry Identities - Pythagorean (Tan² and Sin²/Cos²) to Identity (Radians)

1

Complete the pythagorean trig identity for this expression

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

A	B
$= \sin^2\left(\frac{\pi}{3}\right) - \cos^2\left(\frac{\pi}{3}\right)$	$= \frac{\sin^2\left(\frac{\pi}{3}\right)}{\cos^2\left(\frac{\pi}{3}\right)}$

2

Complete the pythagorean trig identity for this expression

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

A	B
$= \tan^2\left(\frac{5\pi}{3}\right) \cdot \cos^2\left(\frac{5\pi}{3}\right)$	$= \tan^2\left(\frac{5\pi}{3}\right) - \cos^2\left(\frac{5\pi}{3}\right)$

3

Complete the pythagorean trig identity for this expression

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

A	B
$= \tan^2\left(\frac{3\pi}{4}\right) - \cos^2\left(\frac{3\pi}{4}\right)$	$= \tan^2\left(\frac{3\pi}{4}\right) \cdot \cos^2\left(\frac{3\pi}{4}\right)$

4

Complete the pythagorean trig identity for this expression

$$\tan^2\left(\frac{11\pi}{6}\right)$$

A	B
$= \sin^2\left(\frac{11\pi}{6}\right) - \cos^2\left(\frac{11\pi}{6}\right)$	$= \frac{\sin^2\left(\frac{11\pi}{6}\right)}{\cos^2\left(\frac{11\pi}{6}\right)}$

5

Complete the pythagorean trig identity for this expression

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

A	B
$= \sin^2\left(\frac{3\pi}{4}\right) \cdot \tan^2\left(\frac{3\pi}{4}\right)$	$= \frac{\sin^2\left(\frac{3\pi}{4}\right)}{\tan^2\left(\frac{3\pi}{4}\right)}$

6

Complete the pythagorean trig identity for this expression

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

A	B
$= \sin^2\left(\frac{\pi}{3}\right) \cdot \tan^2\left(\frac{\pi}{3}\right)$	$= \frac{\sin^2\left(\frac{\pi}{3}\right)}{\tan^2\left(\frac{\pi}{3}\right)}$

7

Complete the pythagorean trig identity for this expression

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

A	B
$= \frac{\cos^2\left(\frac{4\pi}{3}\right)}{\sin^2\left(\frac{4\pi}{3}\right)}$	$= \frac{\sin^2\left(\frac{4\pi}{3}\right)}{\cos^2\left(\frac{4\pi}{3}\right)}$

8

Complete the pythagorean trig identity for this expression

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

A	B
$= \frac{\cos^2\left(\frac{7\pi}{6}\right)}{\tan^2\left(\frac{7\pi}{6}\right)}$	$= \tan^2\left(\frac{7\pi}{6}\right) \cdot \cos^2\left(\frac{7\pi}{6}\right)$