



Trigonometry Identities - Power Reducing to Identity (Radians)

1

Complete the power reducing identity for this expression

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

A	B
$= \frac{1 - \cos(2 \cdot \frac{5\pi}{3})}{2}$	$= \frac{2}{1 + \cos(\frac{5\pi}{3})}$

2

Complete the power reducing identity for this expression

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

A	B
$= \frac{1 - \cos(2 \cdot \frac{2\pi}{3})}{2}$	$= \frac{1 - \cos(2 \cdot \frac{2\pi}{3})}{1 + \cos(\frac{2\pi}{3})}$

3

Complete the power reducing identity for this expression

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

A	B
$= \frac{1 + \cos(2 \cdot \frac{\pi}{3})}{1 - \cos(\frac{\pi}{3})}$	$= \frac{1 + \cos(2 \cdot \frac{\pi}{3})}{2}$

4

Complete the power reducing identity for this expression

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

A	B
$= \frac{2}{1 + \cos(\frac{11\pi}{6})}$	$= \frac{1 - \cos(2 \cdot \frac{11\pi}{6})}{2}$

5

Complete the power reducing identity for this expression

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

A	B
$= \frac{2}{1 + \cos(\frac{4\pi}{3})}$	$= \frac{1 - \cos(2 \cdot \frac{4\pi}{3})}{1 + \cos(2 \cdot \frac{4\pi}{3})}$

6

Complete the power reducing identity for this expression

$$\tan^2\left(\frac{5\pi}{6}\right)$$

A	B
$= \frac{1 - \cos(2 \cdot \frac{5\pi}{6})}{1 + \cos(2 \cdot \frac{5\pi}{6})}$	$= \frac{2}{1 + \cos(\frac{5\pi}{6})}$

7

Complete the power reducing identity for this expression

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

A	B
$= \frac{1 + \cos(2 \cdot \frac{2\pi}{3})}{2}$	$= \frac{1 - \cos(2 \cdot \frac{2\pi}{3})}{1 + \cos(2 \cdot \frac{2\pi}{3})}$

8

Complete the power reducing identity for this expression

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

A	B
$= \frac{1 - \cos(2 \cdot \frac{\pi}{4})}{1 + \cos(2 \cdot \frac{\pi}{4})}$	$= \frac{1 + \cos(2 \cdot \frac{\pi}{4})}{2}$