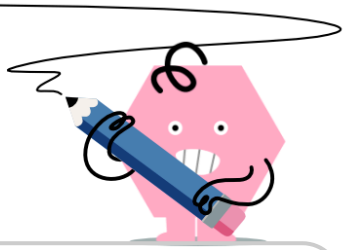
Name

Trigonometry Identities - Half Angle to Identity (Radians)



1

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1-\cos\left(\frac{2\pi}{3}\right)}{2}}$

B $= \pm\sqrt{\frac{1+\cos\left(\frac{2\pi}{3}\right)}{2}}$

2

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1+\sin\left(\frac{3\pi}{4}\right)}{2}}$

B $= \pm\sqrt{\frac{1-\cos\left(\frac{3\pi}{4}\right)}{1+\cos\left(\frac{3\pi}{4}\right)}}$

3

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1+\cos\left(\frac{\pi}{3}\right)}{2}}$

B $= \pm\sqrt{\frac{1+\cos\left(\frac{\pi}{3}\right)}{1-\cos\left(\frac{\pi}{3}\right)}}$

4

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1-\cos\left(\frac{\pi}{6}\right)}{1+\cos\left(\frac{\pi}{6}\right)}}$

B $= \pm\sqrt{\frac{1+\sin\left(\frac{\pi}{6}\right)}{2}}$

5

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1+\cos\left(\frac{7\pi}{6}\right)}{1-\cos\left(\frac{7\pi}{6}\right)}}$

B $= \pm\sqrt{\frac{1-\cos\left(\frac{7\pi}{6}\right)}{2}}$

6

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1+\cos\left(\frac{11\pi}{6}\right)}{2}}$

B $= \pm\sqrt{\frac{1-\cos\left(\frac{11\pi}{6}\right)}{2}}$

7

$$\sin\left(\frac{\frac{5\pi}{4}}{2}\right)$$

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1-\cos\left(\frac{5\pi}{4}\right)}{2}}$

B $= \pm\sqrt{\frac{1+\cos\left(\frac{5\pi}{4}\right)}{1-\cos\left(\frac{5\pi}{4}\right)}}$

8

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

Complete the half-angle identity for this expression

A $= \pm\sqrt{\frac{1+\cos\left(\frac{\pi}{4}\right)}{2}}$

B $= \pm\sqrt{\frac{1-\cos\left(\frac{\pi}{4}\right)}{2}}$