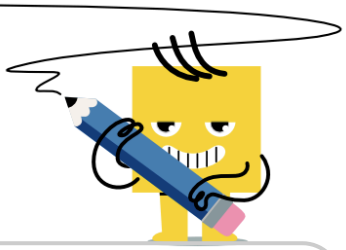
Name

# Trigonometry Identities - Tan^2 and Sec^2 to Identity (Degrees)



**1**

Complete the pythagorean trig identity for this expression

$$\tan^2(135^\circ)$$

A $= \sec^2(135^\circ) - 1$

B $= \csc^2(135^\circ) - 1$

**2**

Complete the pythagorean trig identity for this expression

$$\tan^2(60^\circ)$$

A $= \dfrac{\sin^2(60^\circ)}{\cos^2(60^\circ)}$

B $= \sin^2(60^\circ) - \cos^2(60^\circ)$

**3**

Complete the pythagorean trig identity for this expression

$$\tan^2(120^\circ)$$

A $= 1 - \sec^2(120^\circ)$

B $= \sec^2(120^\circ) - 1$

**4**

Complete the pythagorean trig identity for this expression

$$\cos^2(240^\circ)$$

A $= \dfrac{\tan^2(240^\circ)}{\sin^2(240^\circ)}$

B $= \dfrac{\sin^2(240^\circ)}{\tan^2(240^\circ)}$

**5**

Complete the pythagorean trig identity for this expression

$$\cos^2(60^\circ)$$

A $= \dfrac{\tan^2(60^\circ)}{\sin^2(60^\circ)}$

B $= \dfrac{\sin^2(60^\circ)}{\tan^2(60^\circ)}$

**6**

Complete the pythagorean trig identity for this expression

$$\sec^2(120^\circ)$$

A $= \tan^2(120^\circ) + 1$

B $= 1 - \tan^2(120^\circ)$

**7**

Complete the pythagorean trig identity for this expression

$$\tan^2(45^\circ)$$

A $= \sin^2(45^\circ) - \cos^2(45^\circ)$

B $= \dfrac{\sin^2(45^\circ)}{\cos^2(45^\circ)}$

**8**

Complete the pythagorean trig identity for this expression

$$\sin^2(150^\circ)$$

A $= \tan^2(150^\circ) \cdot \cos^2(150^\circ)$

B $= \tan^2(150^\circ) - \cos^2(150^\circ)$