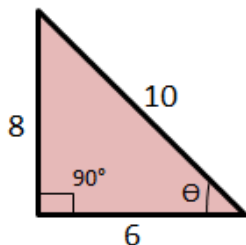


Trigonometric Identities Assignment

Write the value of each the trigonometric identities for the triangle given below.



1. $\sin(\theta) =$ _____

2. $\cos(\theta) =$ _____

3. $\tan(\theta) =$ _____

4. $\cot(\theta) =$ _____

5. $\operatorname{cosec}(\theta) =$ _____

6. $\sec(\theta) =$ _____

Write the value of the remaining trigonometric identities if:

$$\cot(\theta) = 1 \quad ; \quad \sin(\theta) = \frac{1}{3}$$

1. $\tan(\theta) =$ _____

2. $\cos(\theta) =$ _____

3. $\operatorname{cosec}(\theta) =$ _____

4. $\sec(\theta) =$ _____

Trigonometric Identities Assignment

Complete each of the statements given below.

1. $\sin(\theta) \cdot \tan(\theta) \cdot \operatorname{cosec}(\theta) \cdot \cot(\theta) =$ _____

2. $\sec(\theta) \cdot \tan(\theta) \cdot \sin(\theta) =$ _____

3. $\sec(\theta) \cdot (1 - \sin^2(\theta)) =$ _____

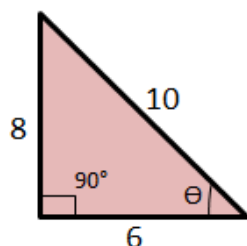
4. $\sec^2(\theta) + \sec^2(\theta)\tan^2(\theta) =$ _____

5. $\frac{1 - \sin^2(\theta)}{\operatorname{cosec}^2(\theta) - 1} =$ _____

6. $\sin^4(\theta) - \cos^4(\theta) =$ _____

Trigonometric Identities Assignment

Write the value of each the trigonometric identities for the triangle given below.



1. $\sin(\theta) = \frac{8}{10}$

2. $\cos(\theta) = \frac{6}{10}$

3. $\tan(\theta) = \frac{8}{6}$

4. $\cot(\theta) = \frac{6}{8}$

5. $\operatorname{cosec}(\theta) = \frac{10}{8}$

6. $\sec(\theta) = \frac{10}{6}$

Write the value of the remaining trigonometric identities if:

$$\cot(\theta) = 1 \quad ; \quad \sin(\theta) = \frac{1}{3}$$

1. $\tan(\theta) = 1$

2. $\cos(\theta) = \frac{1}{3}$

3. $\operatorname{cosec}(\theta) = 3$

4. $\sec(\theta) = 3$

Trigonometric Identities Assignment

Complete each of the statements given below.

1. $\sin(\theta) \cdot \tan(\theta) \cdot \operatorname{cosec}(\theta) \cdot \cot(\theta) =$ _____ **1** _____

2. $\sec(\theta) \cdot \tan(\theta) \cdot \sin(\theta) =$ _____ **$\tan^2(\theta)$** _____

3. $\sec(\theta) \cdot (1 - \sin^2(\theta)) =$ _____ **$\operatorname{cosec}(\theta)$** _____

4. $\sec^2(\theta) + \sec^2(\theta)\tan^2(\theta) =$ _____ **$\sec^4(\theta)$** _____

5. $\frac{1 - \sin^2(\theta)}{\operatorname{cosec}^2(\theta) - 1} =$ _____ **$\sin^2(\theta)$** _____

6. $\sin^4(\theta) - \cos^4(\theta) =$ _____ **$2\sin^2(\theta) - 1$** _____