

m180

HomeWork 10

Itahn

Due: April 25

Name:

1) $\sin \theta = -\frac{4}{5}$, $\cos \theta < 0$

Find:

$$\cos \theta =$$

$$\tan \theta =$$

$$\csc \theta =$$

$$\sec \theta =$$

$$\cot \theta =$$

2) write in terms of sine and cosine, write ^{answer} ~~with no~~ with no fractions:

$$\cot^2 \theta (1 + \tan^2 \theta)$$

3) $(\sec \theta + \csc \theta)(\cos \theta - \sin \theta)$

Perform the indicated operation and simplify the result so that there are no quotients

4) $(1 + \tan \theta)^2 - 2 \tan \theta$

Factor the expression

5) $\sec^2 \theta - 1$

6) $2 \sin^2 \theta + 3 \sin \theta + 1$

Simplify the given function to a constant, or a single function, or a power of a function.

7) $\csc^2 \theta - 1$

8) $\frac{\sin^2 \theta}{\cos^2 \theta} + \sin \theta \csc \theta$

Verify the Identity! Show work

9) $1 - \frac{\sin^2 \theta}{\cos \theta} = \cos \theta$

10. $\sin^2 \theta \sec^2 \theta + \sin^2 \theta \csc^2 \theta = \sec^2 \theta$