

Quiz 11

Due: 14 November 2024

Answer the questions in the spaces provided. **Show all of your work and circle the answer you would like to have graded for each question.**

Name: _____

1. Find the exact value of $\sec\left(\frac{3\pi}{8}\right)$ by hand.

2. Verify that $\frac{2 \cos(2x)}{\sin(2x)} = \cot(x) - \tan(x)$.

3. Suppose that $\csc(x) = -5$ and $\pi < x < \frac{3\pi}{2}$. Compute $\sin\left(\frac{x}{2}\right)$ by hand.

4. Use the figure to compute each of the following:
(You do not need to simplify your answers.)

a.) $\tan\left(\frac{\alpha}{2}\right)$;

b.) $\cos(2\beta)$;

c.) $\sin(4\alpha)$.

