Quiz 9 Due: 9 April 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: _____

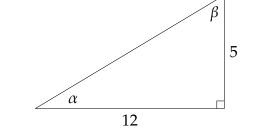
1. Use a double angle formula to compute $4\sin(\frac{\pi}{8})\cos(\frac{\pi}{8})$ by hand.

2. Use a half angle formula to compute $\cos(\frac{7\pi}{8})$ by hand.

3. Suppose $sin(x) = -\frac{12}{13}$ and $\pi < x < \frac{3\pi}{2}$. Compute both $cos(\frac{x}{2})$ and sin(2x) by hand.

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

a.) $tan(2\alpha)$;



b.)
$$\cos\left(\frac{\beta}{2}\right);$$

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