

MATH. 125, QUIZ 9 - Section 5.2 & 5.3 (25points = 5% final grade)

1. (7 points) Find an expression for $\sin 4\alpha$ in terms of $\sin \alpha$ and $\cos \alpha$. Simplify.

Solution:

2. (6 points) Find the exact value of $\tan 22.5^\circ$. Simplify.

Solution:

3. Use the information given about the angle α :

$$\cos \alpha = -0.2, \quad \pi < \alpha < 2\pi$$

to find the exact value of each of the following

(a) (7 points) $\sin 2\alpha =$

Solution:

(b) (7 points) $\sin \frac{\alpha}{2} = .$

Solution: