

MATH. 125, QUIZ 11 - Section 5.5 (25points = 5% final grade)

You are allowed to use a calculator only for the last problem.

1. (9 points each) Solve the following equations on the interval $0 \leq \theta < 2\pi$; if there is no solution explain why not. **Show each step of your solution, you do not get credit for just writing the final answer. You may get extra/bonus credit for presenting and explaining your solutions in a professional way (like in the textbook).**

(a) $\cos 2\theta + 5 \cos \theta + 3 = 0$.

(b) $\sin 2\theta = 2 \sin \theta$.

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(c) $\sin^2 x + \sin x = \frac{1}{2}$ (use two decimal points)