

QUIZ 11 - MATH 111

Friday, December 6

YOUR NAME: _____

George Voutsadakis

Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [6 points] Solve the following non-linear system by hand.

$$\begin{cases} x^2 + y^2 = 31 \\ x^2 + y = 1 \end{cases}$$

2. [6 points] Decompose into partial fractions

$$\frac{-9x - 16}{(x + 7)(x^2 + x + 5)}.$$