QUIZ 8 - MATH 131

Thursday, November 10

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. [3 points] Write $z = 5 - 5\sqrt{3}i$ in polar form.

2. [3 points] Suppose $z_1 = 10 \text{ cis}(150°)$ and $z_2 = 2 \text{ cis}(30°)$. Find $\frac{z_1}{z_2}$ and write your answer in standard form.

3. [4 points] Use De Moivre's Formula to compute $(-1 + i)^{12}$ and write your answer in standard form.