

**Quiz 9   Calc 3   Due 12/9/2005**

Each problem is worth 2 points.

1. Compute  $(3 + 2i) - (2 - 5i)$ .

2. Compute  $(3 + 2i) \div (2 - 5i)$  and write your answer in standard form.

3. Compute  $(1 - i) \times (1 + i)$  and write your answer in standard form.

4. Write  $\frac{\sqrt{3}}{2} + \frac{1}{2}i$  in polar form and find  $\left(\frac{\sqrt{3}}{2} + \frac{1}{2}i\right)^6$ .

5. Write  $e^{-6\pi i}$  in standard form.