Practice Quiz 10   Calc 3   12/6/2006

Each problem is worth 2 points.

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

I get $1 + 7i$.

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

I get $-4/29 + 19/29\ i$.

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

I get $2 + 0i$.

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

I get a polar form of 1 cis π/6.

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

I get $1 + 0i$.