Each problem is worth 2 points.

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

2. Compute \((3 + 2i) ÷ (2 - 5i)\) 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.