

**Math 98 Worksheet #4**  
**July 17, 2007**

1. Simplify the following.

(a)  $(1 - 3i) + (-3 + i)$

(b)  $12i(3 - 4i)$

(c)  $\sqrt{-6} \cdot \sqrt{-24}$

(d)  $\frac{8i}{\sqrt{-32}}$

3. Solve the following equations.

(a)  $x^2 + 10x + 13 = -5$

(b)  $m^2 - 6m = -13$

2. Solve the following equations.

(a)  $r^2 = 81$

(b)  $2a^2 + 9 = 49$

(c)  $k^2 + 10 = 6$

(d)  $(\frac{1}{3}p + 1)^2 = 9$

(e)  $3(x - 13)^2 + 8 = 2$