

## Math 99 Take-home Quiz 4

SHOW ALL WORK. This quiz is due Tuesday, May 20. You may work collaboratively with your classmates, but do not discuss these problems with anyone outside of the class. Each problem is worth 5 points.

Solve using the indicated method. Simplify as much as possible, and, where appropriate, write your answer in the form  $a+bi$ .

1. Square Root Property:  $x^2 + 15 = 6$

2. Complete the Square:  $2x^2 - 12x + 2 = 0$

3. Quadratic Formula:  $2x^2 - x = -5$

4. A business sells  $n$  shirts,  $n \leq 26$ , at a price of  $(25 - 0.1n)$  dollars per shirt. How many shirts must be sold to have a revenue of \$460? (Recall that revenue = unit price  $\times$  number sold).