**DO YOUR HOMEWORK ON A SEPARATE SHEET OF PAPER!!! GRAPH PAPER WHEN NEEDED!**

**Practice 4-7: Complete your assignment on a separate sheet of paper. Show all work.**

**1**. Solve using the Quadratic Formula

**a.** **b.**

1. Without solving, find the discriminant and determine the number of real solutions.
2. **b**.
3. The bakery sells more cupcakes when the prices are lower, but then its profit changes. The function models the bakery’s daily profit, *y* in dollars, from selling cupcakes, where *x* is the price of the cupcakes in dollars. What’s the highest price the bakery can charge and make a profit of at least $200?

**Practice 4-8: Complete your assignment on a separate sheet of paper. Show all work.**

**1.** Simplify

**a**. **b**. **c**. (

**d**. **e**. **f.**

**2.** Find the absolute value of .

**3**. Solve

**a.** **b**.

**4. Error Analysis.** Describe and correct the error made in simplifying .

**Practice 4-9: Complete your assignment on a separate sheet of paper. Show all work.**

1. Solve the system by substitution.
2. Solve the system by substitution.
3. Solve the system by graphing.
4. Reasoning. How many points of intersection can the graphs of the following types of functions have? Draw graphs to justify your answers.
5. a linear function and a quadratic function
6. two quadratic functions
7. a linear function and an absolute value function