NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Advanced Algebra Foundations Review

Make your best effort on the following problems without using a calculator.

**Show how to simplify**

1) 2) 3)

4) 5)

**Show how to factor completely.**

6) 7)

8) 9)

10) 11)

**Show how to Simplify**

12) 13)

14)

**Show how to perform the indicated operation.**

15) 16)

17) 18)

19) 20)

21.

**Show how to solve the following quadratic equations by factoring.**

22) = 0 23)

24)

**Show how to solve the quadratic equation by using square roots.**

25)

**Show how to solve the quadratic equation by using the quadratic formula.**

26) 27)

**For the following equations, find the discriminant and the number and types of solutions.**

28) 29)

**Show how to solve the quadratic equation by completing the square.**

30)