QZ 22.1 radicals, quadratic formula, discriminant For #'s 1-2, simplify each radical.

**1**. 
$$\sqrt{180}$$
 **2**.  $\sqrt{245}$ 

For #'s 3-4, solve the quadratic equation (Answer should be simplified).

**3.** 
$$7x^2 + 4x - 1 = 0$$
 **4.**  $-x^2 + 2x + 4 = 0$ 

- 5. What is the discriminant of  $2x^2 + 6x 3 = 0$ ?
  - 6. What type of solutions would you expect for:  $3x^2 - 8x + 7 = 0$ ?