

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Basic Skills**  
**Solving by Quadratic Formula**

Solve the quadratic by using the quadratic formula. Write the answer in simplest radical form (no decimals), if necessary.

1.  $x^2 + 2x + 2 = 0$

2.  $x^2 + 12x + 16 = 0$

3.  $x^2 - 5x + 6 = 0$

4.  $3x^2 + 6x + 6 = 0$

5.  $2x^2 + 4x + 7 = 0$

6.  $-2x^2 - 4x + 13 = 0$

7. An object is launched at 19.6 meters per second (m/s) from a 58.8-meter tall platform. The equation for the object's height  $s$  at time  $t$  seconds after launch is  $s(t) = -4.9t^2 + 19.6t + 58.8$ , where  $s$  is in meters. When does the object strike the ground?