Name

Graphing Quadratic Systems

Class

Date

**Solve each system by graphing. Check your answers.**

**1. ** **2. **

**3.  4. **

**5.  6. **

**7.  8. **

**9.  10. **

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_**

**Solving Quadratic systems algebraically.**

**Solve each system by substitution. Check your answers.**

**1.  2. **

**3.  4. **

**6.  5. **

**7.  8. **

**9.** In business, a break-even point is the point (*x*, *y*) at which the graphs of the revenue and cost functions intersect. For one manufacturing company, the revenue from producing *x* items is given by the function *y =* 2*x +* 12 and the cost of producing *x* items is given

by *y =* −*x*2 + 10*x +* 5. Find all break-even points.

**10.** Two skaters are practicing at the same time on the same rink. One skater follows the path *y =* −2*x +* 32, while the other skater follows the curve

*y =* −2*x*2 + 18*x*. Find all points where they might collide if they are not careful.