Solve each system by graphing:

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

2. $y = x^2 + 4$
   $y = 4x$

3. $y = x^2 - 5x - 4$
   $y = -2x$

4. $y = x^2 + 2x + 4$
   $y = x + 1$

5. $y = x^2 + 2x + 5$
   $y = -2x + 1$

6. $y = 3x + 4$
   $y = -x^2$

Solve each system algebraically:

7. $y = -x + 3$
   $y = x^2 + 1$

8. $y = x^2$
   $y = x + 2$

9. $y = -x - 7$
   $y = x^2 - 4x - 5$

10. $y = x^2 + 11$
    $y = -12x$

11. $y = 5x - 20$
    $y = x^2 - 5x + 5$

12. $y = x^2 - x - 90$
    $y = x + 30$