Algebra II   Name _____

Quadratics #9

Solve the following equations by graphing. Use your graphing calculator.

1. $x^2 + 3x + 2 = 0$

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

3. $f(x) = x^2 - 9$

4. $f(x) = -x^2 - 4 + 8$

5. $8x = -4 - 4x^2$

6. $3x^2 = 6x - 3$

7. $\dfrac{1}{5}x^2 + 6 = 2x$

8. $3x = \dfrac{1}{4}x^2 + 5$

Factor the following.

9. $x^4 - 81$

10. $2x^2 + 4x - 70$

11. $12x^2 - 23x - 9$

12. $3x^6 - 147$