PAP Algebra 2 Name: _____

Solving Quadratics Practice and Applications

Solve the following quadratics by factoring.

1. $20x = 12x^2 + 3$

2. $10x^2 + 11x = -3$

3. $-25 = 2x^2 - 15x$

4. $40x + 12x^2 = 63$

5. $11x = 5x^2 + 2$

6. $6x^2 + 28x = -16$

Solve the following quadratics by graphing.

7. $-2x = -x^2 - 4$

8. $-24 = -3x^2 - 6x$

Solve the following quadratics using the quadratic formula. $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

9. $0 = x^2 + 5x - 24$

10. $0 = 6x^2 + x - 2$

11. $11 = 9x^2 - 6x$

12. $0 = -3(x-1)^2 + 48$