0-4 Solving Quadratics

Name _____

We can solve **some** quadratic equations by factoring:

Example: $3x^2 + 7x - 6 = 0$

$(3x - 2)(x + 3) = 0$

$3x - 2 = 0$ or $x + 3 = 0$

$x = \frac{2}{3}$ or $x = {}^{-}3$

Solve these quadratic equations by factoring.

1. $5x^2 + 13x + 6 = 0$

2. $4x^2 + 16x + 15 = 0$

3. $30x^2 - x - 3 = 0$

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

5. $6x^2 + 23x + 20 = 0$

6. $8x^2 + 17x + 2 = 0$

Solve these quadratic equations using the quadratic formula, which always works unlike factoring.

7. $2x^2 + 8x + 5 = 0$

8. $5x^2 + 2x - 6 = 0$