

# 12.5

## Methods of Solution

# Pg 576

### Methods for Solving a Quadratic Equation

Method	When to Use the Method
1. Using the quadratic formula	1. If an equation is in the form $ax^2 + bx + c = 0$ , especially if you use a calculator.
2. Factoring	2. If an equation is in the form $ax^2 + bx = 0$ , or if the factors are easily seen.
3. Using the property of square roots of equal numbers	3. If an equation is in the form $ax^2 + c = 0$ .
4. Completing the square	4. If an equation is in the form $x^2 + bx + c = 0$ and $b$ is an even number.

Indicate which method would be best and then solve.

1)  $50x^2 - 98 = 0$

Indicate which method would be best and then solve.

2)  $3n^2 + 10n - 5 = 0$

Indicate which method would be best and then solve.

$$3) \quad p^2 - 12p + 3 = 0$$

Indicate which method would be best and then solve.

$$4) \quad r^2 + 9r + 8 = 0$$