

Name: _____

Date: _____

Class/Home worksheet: Alg2H

Quadratic equation: using factoring and completing the square.

(book chapter 8, page 342 to 345)

An equation of the type

$$ax^2 + bx + c = 0$$

where a,b, and c are constants, and $a \neq 0$, is called **standard form of the quadratic equation.**

Solve:

$$3x^2 + 5x = 0$$

Solve:

$$2x^2 + 7x = 0$$

Solve:

$$5x^2 - 7 = 0$$

Solve:

$$3x^2 - 6 = 0$$

Solve:

$$6x^2 - 7x + 2 = 0$$

Solve:

$$14x^2 + 2 = 11x$$

Completing the Square (P. 343)

Solve by completing the square:

$$x^2 - 2x - 8 = 0$$

Solve by completing the square:

$$4x^2 + 12x - 7 = 0$$

Solve by completing the square:

$$3x^2 + 18x + 24 = 0$$

From the book, Page 345-6

<p>(1) Solve: $7x^2 - 3x = 0$</p>	<p>(6) Solve: $6x^2 - x - 2 = 0$</p>
<p>(11) Solve: $3x^2 + 7x = 20$</p>	<p>(18) Solve: $4x^2 = 20$</p>
<p>(42) Solve by completing the square:</p> $x^2 - 4x + 1 = 0$	<p>(43) Solve by completing the square:</p> $y^2 + 6y - 3 = 0$