Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

Class/Home worksheet: Alg2H

Quadratic equation: using factoring and completing the square.

(book chapter 8, page 342 to 345)

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| An equation of the type $$ax^{2}+bx+c=0$$ where a,b, and c are constants, and $a\ne 0$, 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:$$14x^{2}+2=11x$$ |

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| 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

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| (1) Solve: $7x^{2}-3x=0$  | (6) Solve: $6x^{2}-x-2=0$ |
| (11) Solve: $3x^{2}+7x=20$ | (18) Solve: $4x^{2}=20$ |
| (42) Solve by completing the square:$$x^{2}-4x+1=0$$ | (43) Solve by completing the square:$$y^{2}+6y-3=0$$ |