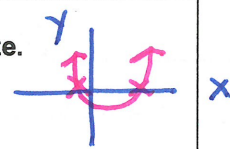STANDARD FORM OF A Q.E.
$$Ax^2 + Bx + C = 0$$

Date:_____

**10R** **Review all the methods to solve Quadratic Equations**

| Methods | When to Use |
|---|---|
| 1) Factoring | Use when a quadratic equation can be ___*factored*___ easily. *when A=1 typically* |
| 2) Graphing | Use when ___approximate___ solutions are adequate.  The solutions are the ___X intercepts___. |
| 3) Finding square roots | Use when solving an equation that can be written in the form ___$X^2 = \#$___. Remember ___$X = \pm\sqrt{\#}$___, *2solutions* |
| 4) Quadratic formula | Can be used for ___ALL___ quadratic equation. |
| 5) **Algebra 2 Method** **Completing the square** | Can be used for any quadratic equation $ax^2 + bx + c = 0$ but is simplest to apply when ___a = 1___ and b is an ___even___ number. |

☑ *Choose a solution method*

**Tell what method(s) you would use to solve the quadratic equation. *Explain* your choice(s).**

**a.** $6x^2 - 11x + 7 = 0$

- This quadratic equation cannot be ___*factored*___ easily and completing the square would result in many fractions.
- So, the best method to solve this quadratic equation would be ___Quadratic Formula___

**b.** $4x^2 - 36 = 0$

- Since this quadratic equation would be easy to put in the form ___$X^2 = \#$___;
- The best method to solve this quadratic equation would be ___finding SQUARE ROOTS___

**c.** $x^2 + 8x = 9$

- Since this quadratic equation would be easy to put in ___STANDARD___ form and then ___FACTORED BECAUSE A=1___;
- The best method to solve this quadratic equation would be ___FACTORING.___