Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples	
Choosing the **BEST METHOD**	**METHOD**	**BEST USED WHEN**
	FACTORING	
	SQUARE ROOTS	
	COMPLETING THE SQUARE	
	QUADRATIC FORMULA	
When is it **FACTORABLE?**		
EXAMPLES (HINT: Use the discriminant to determine if it's factorable!)	**Directions:** Choose a method and solve each equation below. You can only use each method once.	
	1. $x^2 - 6x + 7 = 73$ ❑ F ❑ SR ❑ CS ❑ QF	**2.** $9x^2 - 4 = 0$ ❑ F ❑ SR ❑ CS ❑ QF
	3. $2x^2 + 8x + 10 = 3$ ❑ F ❑ SR ❑ CS ❑ QF	**4.** $x^2 + 9x + 14 = 0$ ❑ F ❑ SR ❑ CS ❑ QF

Directions: Solve each equation below using your method of choice. Simplify all irrational solutions.

5. $x^2 - 2x = 4$

6. $10x^2 + x - 2 = 0$

7. $5x^2 - 15x - 50 = 0$

8. $36x^2 = 9x$

9. $-x^2 + 16x - 63 = 0$

10. $x^2 + 10x = 4$

11. $6x^2 - 16 = 32$

12. $4x^2 = 4x + 7$

Name: _____ **Unit 8:** Quadratic Equations

Date: _____ **Bell:** _____ **Homework 12:** Solving Quadratics by Method of Choice

**** This is a 2-page document! ****

Solve each equation by factoring, square roots, completing the square, or the quadratic formula. Simplify all irrational solutions.

1. $x^2 + 11x + 28 = 0$	**2.** $10x^2 - 12x = 0$
3. $2x^2 - 4x = 3$	**4.** $8x^2 = 32$
5. $10x^2 - x - 3 = 0$	**6.** $3x^2 - 36 = 12x$
7. $-x^2 + 4x - 54 = 0$	**8.** $7 - 2x^2 = -47$

9. $6x^2 = x^2 + 5x$	**10.** $4x^2 - 2x + 1 = 2x$
11. $3x^2 - 5x = 14 - 4x$	**12.** $\frac{2}{3}x^2 - 7 = 47$
13. $4x^2 - 6x + 1 = 6$	**14.** $-2x^2 + 24x - 24 = 0$
15. $16x^2 + 7 = 16$	**16.** $9x^2 - 6x + 10 = 11$