

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

Topic: \_\_\_\_\_ Class: \_\_\_\_\_

Main Ideas/Questions	Notes/Examples
<b>SOLVING</b> <i>Quadratics</i> <b>BY FACTORING</b>	① <b>MOVE ALL TERMS</b> to one side and set the equation <b>EQUAL TO 0</b> .
	② <b>FACTOR!</b>
	③ <b>SET EACH FACTOR EQUAL TO 0</b> and <b>SOLVE</b> for each x-value.
	④ Write your answer as a <b>SOLUTION SET</b> . $x = \{ \_, \_ \}$

**Directions:** Solve each equation by factoring.

1.  $x^2 + 9x = 0$

2.  $4x^2 - 8x = 0$

3.  $x^2 - 4 = 0$

4.  $9x^2 - 25 = 0$

5.  $x^2 - 10x + 21 = 0$

6.  $2x^2 - 2x - 24 = 0$

7.  $3x^2 - 13x - 30 = 0$

8.  $6x^2 + 5x - 4 = 0$

$$9. 2x^2 = 5x$$

$$11. 2x^2 - 50 = x^2 - 1$$

$$13. x^2 + 2x = 80$$

$$15. 2x^2 - 9x - 65 = x^2 - x$$

$$17. 2x^2 = x + 21$$