Mr. Tinich

Name _____

Due Friday, February 10th, 2017 Date _____ Hour _____

Algebra Review #4: Finding Zeros of Quadratics

Solve by Factoring

1.) $x^2 - 64 = 0$

2.) $x^2 - 6x - 16 = 0$

3.) $x^2 + 3x = 40$

4.) $2x^2 + 3x + 1 = 0$

5.) $x^2 - 100 = 0$

6.) $x^2 + 6x = 0$

Solve by Square Roots

7.) $x^2 = 64$

8.) $4x^2 = 81$

9.) $x^2 + 7 = -300$

10.) $(x - 5)^2 = 36$

Solve by using the Quadratic Formula $\boldsymbol{x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}}$

11. $x^2 + 3x + 2 = 0$

12. $4x^2 - 8x = 1$

13. $x^2 + 8x = 0$

Solve each equation any way you want. Show your work.

14. $x^2 + 11x + 18 = 0$

15. $x^2 + 2x + 1 = 15$

16. $7x^2 - 9x + 1 = 0$

17. $(x + 2)^2 = 36$

18. $x^2 - 10x + 25 = 0$

19. $x^2 + 3x + 7 = 0$

20. $x^2 = 36$

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

22. $x^2 - 5x + 4 = 0$

REASONING:

23. Explain why **$x^2 = -81$** DOES NOT have a solution.

24. Which method can't you use to solve this problem? **$x^2 - 47 = 0$**

Circle one: Factoring Square Roots Quadratic Formula

Explain why:

25. Which method can't you use to solve this problem? $x^2 + 7x = 0$

Circle one: Factoring Square Roots Quadratic Formula

Explain why:

26. Which method can you use to solve all quadratic equations?

Circle one: Factoring Square Roots Quadratic Formula

Explain why: