Secondary 2H **Name_____ Desk _____**

Unit 5 **Quadratic Formula (5.3D/5.3E)**

Score _____

Calculate the discriminant for each quadratic and describe the nature of the roots. Then, find the zeros.

1. $x^2 + x - 20 = 0$

2. $16x^2 - 24x - 27 = 0$

3. $x^2 + 4 = 0$

4. $x^2 + 1 = 0$

5. $x^2 - 16x + 65 = 0$

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

7. $2x^2 - 3x - 35 = 0$

8. $x^2 + 5x + 5 = 0$

9. $x^2 + 49 = 0$

10. $x^2 - 12x + 61 = 0$

11. $9x^2 + 12x + 13 = 0$

12. $16x^2 + 24x + 13 = 0$

13. $x^2 + 8x + 12 = 0$

14. $2x^2 - 11x + 12 = 0$

15. $12x^2 - 35x + 18 = 0$

16. $x^2 - 6x + 13 = 0$

17. $11x^2 + 7x + 1 = 0$

18. $x^2 + 4x + 16 = 0$

19. $x^2 + 6x + 25 = 0$

20. $2x^2 - 4x + 1 = 0$

21. $x^2 - 6x + 9 = 0$

22. Is it possible to get 1 Real solution and 1 Imaginary solution from a quadratic equation? Explain why or why not.