Algebra 1 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_

**Unit 3 Study Guide B**

***Factoring and Solving Quadratic Equations***: **MGSE9-12.A.REI.4 & MGSE9-12.A.REI.4b**

***Remember to show work!***

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| **Use factoring and the Zero-Product Property to find the zeros (solutions) of the quadratic equations.** | |
| 1. x2 – 14x – 15 = 0 | 1. 3x2 + 2x – 8 = 0 |
| 1. 5x2 + 4x –12 = 0 | 1. 2x2 - 50 = 0 |
| 1. x2 + 3x – 10 = 0 | 1. 5x2 + 10x + 5 = 0 |
| **Solve each equation by using square roots.** | |
| 1. 3x2 = 27 | 1. (x + 8)2 = 32 |
| 1. 3(x - 2)2 + 4 = 52 | |
| **Solve each equation by completing the square.** | |
| 1. x2 - 6x + 5 = 0 | 1. -12x = 3x2 – 9 |
| **Use the quadratic formula to solve the equations.** | |
| 1. -7x2 – 5x +1 = 0 | 1. x2 - 4x - 12 = 0 |
| 1. x2 - 5x + 6 = 0 | |
| ***Error Analysis*: Find and circle the error. Then give the correct answer.**   1. Solve the equation by completing the square. | |