Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_

Algebra 2 Honor Spiral 9 Review

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| Solving Quadratics by Factoring | | |
| 1. Factor completely:   a.  b. | 1. Solve by Factoring   a.  b. | |
| Solving by Square Roots; Complex Numbers | | |
| Solve for all possible values of x. | | |
| a.  b. | a.  b. | |
| Solving by Completing the Square | | |
| Solve the following by completing the square. | | |
|  |  | |
| Applications of Quadratics | | |
| 1. A rocket is launched from the ground with a velocity of 128 feet per second.   a. Write a model describing the height of the rocket.  b. How long is the rocket in the air?  c. When does the rocket reach its highest point in the air and what is the greatest height?  d. How high is the rocket at 2 seconds? | | 1. A rocket carrying fireworks is launched from a hill 80 feet above a lake at a velocity of 64 feet per second.   a. Write a model describing the height of the rocket.  b. How long does it take for the rocket to hit the lake?  c. When does the rocket reach its highest point in the air and what is the greatest height? |