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

Quadratics Crossword Puzzle

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  | 2  S | T | A | N | D | A | R | D | F | O | R | M |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  |  | 3  Q |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 4  T |  |  |  |  | 5  I | M | A | G | I | N | A | R | Y | N | U | M | B | E | R |  |  |  |  |
|  |  |  |  |  |  | W |  |  |  |  |  |  |  |  |  | O |  |  |  |  | A |  |  |  |  |  | 6  A |  |  |
|  |  |  |  |  |  | O |  |  |  |  |  |  |  |  |  | M |  |  |  |  | D |  |  |  |  |  | X |  |  |
|  |  |  |  |  |  | 7  R | A | D | I | C | A | L |  | 8  O |  | I |  |  |  |  | R |  |  |  |  |  | I |  |  |
|  |  |  |  | 9  Q |  | E |  |  |  |  |  |  |  | N |  | A |  |  |  |  | A |  |  |  |  |  | S |  |  |
|  |  | 10  C |  | U |  | A |  |  |  |  | 11  N | O | R | E | A | L | S | O | L | U | T | I | O | N | S |  | O |  |  |
|  |  | O |  | A |  | L |  |  |  |  |  |  |  | R |  |  |  |  |  |  | I |  |  |  |  |  | F |  |  |
|  |  | E |  | D |  | S |  |  |  | 12  V | E | R | T | E | X | F | O | 13  R | M |  | C |  |  |  |  |  | S |  |  |
|  |  | F |  | R |  | O |  |  |  |  |  |  |  | A |  |  |  | O |  |  | F |  |  |  |  |  | Y |  |  |
|  |  | F |  | A |  | L |  |  |  |  |  |  |  | L |  | 14  M |  | O |  |  | U |  |  |  |  |  | M |  |  |
|  |  | I |  | T |  | U |  |  |  |  | 15  C | O | N | S | T | A | N | T |  |  | N |  |  |  |  |  | M |  |  |
|  |  | C |  | I |  | T |  | 16  M |  | 17  P |  |  |  | O |  | X |  |  |  |  | C |  |  |  |  |  | E |  |  |
|  | 18  D | I | S | C | R | I | M | I | N | A | N | T |  | L |  | I |  | 19  X | I | N | T | E | R | 20  C | E | P | T |  |  |
|  |  | E |  | E |  | O |  | N |  | R |  |  |  | U |  | M |  |  |  |  | I |  |  | O |  |  | R |  |  |
|  |  | N |  | Q |  | N |  | I |  | A |  | 21  V |  | T |  | U |  | 22  Z | E | R | O | S |  | M |  |  | Y |  |  |
|  |  | T |  | U |  | S |  | M |  | B |  | E |  | I |  | M |  |  |  |  | N |  |  | P |  |  |  |  |  |
|  |  | S |  | A |  |  |  | U |  | O |  | R |  | O |  |  |  |  |  |  |  |  |  | L |  |  |  |  |  |
|  |  |  |  | T |  | 23  C | O | M | P | L | E | T | I | N | G | T | H | E | S | Q | U | A | R | E |  |  |  |  |  |
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|  |  |  |  | O |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  | N |  |  |  |  |  |
|  |  |  |  | N |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | U |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 24  Q | U | A | D | R | A | T | I | C | F | O | R | M | U | L | A |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | B |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 25  S | Q | U | A | R | E | R | O | O | T |  |
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| **Across**  **2.** y= ax^2 + bx + c  **5.** any number in the form a + bi, where a and b are real numbers and b doesn't equal zero  **7.** an equation that has the radical symbol  **11.** the linear and quadratic graphs don't intersect and no point satisfies both equations  **12.** y= a(x-h)^2 + k  **15.** a number without a variable  **18.** b^2 -4ac  **19.** where the graph crosses the x-axis  **22.** synonym for solution; setting the equation equal to zero to find the value of x  **23.** group ax^2 + bx together and c in a group then add (b/2)^2 to both groups  **24.** x= -b plus or minus the square root of b^2 -4ac divided by 2a (a method of solving quadratic equations  **25.** a number that multiplies by itself to equal a quantity | **Down**  **1.** an algebraic expression that has three terms  **3.** f(x)= ax^2 + bx + c (represents the parabola)  **4.** the linear and quadratic graphs intersect at two places (points), which satisfy both equations  **6.** a line that divides an object in half creating mirror images on either side  **8.** the linear and quadratic graphs intersect at one point, which satisfies both equations  **9.** ax^2 + bx + c (can be solved by graphing, factoring,or completing the square)  **10.** the number in front of (being multiplied by) the variable  **13.** synonym for solution; where the graph crosses the x-axis  **14.** the highest point on a graph  **16.** the lowest point on a graph  **17.** a u-shaped graph with a minimum or maximum vertex  **20.** imaginary numbers and real numbers together (a + bi)  **21.** (h,k) can either be a maximum or a minimum |