Quadratic Crossword Puzzle!

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | 3  C | O | E | F | F | I | C | I | E | N | T | S |  |  |  |  |  | 4  D |  |  |  |
|  |  |  |  | 5  O |  |  |  |  |  |  |  |  |  |  |  |  | A |  |  |  |  |  |  | 6  Q |  | I |  |  |  |
|  |  | 7  X | I | N | T | E | R | C | E | P | T |  |  |  | 8  I |  | L |  |  |  |  |  |  | U |  | S |  |  |  |
|  |  |  |  | E |  |  |  |  |  |  |  |  |  |  | M |  | S |  | 9  C |  |  |  |  | A |  | C |  |  |  |
|  |  |  |  | R |  | 10  R |  |  |  |  |  | 11  N |  |  | A |  | O |  | O |  |  |  |  | D |  | R |  |  |  |
| 12  P |  |  |  | E |  | A |  |  |  |  |  | O |  |  | G |  | L |  | M |  |  |  |  | R |  | I |  |  |  |
| A |  | 13  S | T | A | N | D | A | 14  R | D | F | O | R | M |  | I |  | U |  | P |  |  |  |  | A |  | M |  |  |  |
| R |  |  |  | L |  | I |  | O |  |  |  | E |  |  | N |  | T |  | L |  | 15  Q |  |  | T |  | I |  |  |  |
| A |  |  |  | S |  | C |  | O |  | 16  Q | U | A | D | R | A | T | I | C | E | Q | U | A | T | I | O | N |  | 17  A |  |
| B |  |  |  | O |  | A |  | T |  |  |  | L |  |  | R |  | O |  | X |  | A |  |  | C |  | A |  | X |  |
| O |  |  |  | L |  | L |  | S |  |  |  | S |  |  | Y |  | N |  | N |  | D |  |  | F |  | N |  | I |  |
| L |  |  |  | U |  |  |  |  | 18  Z | E | R | O | S |  | N |  | 19  S | Q | U | A | R | E | R | O | O | T |  | S |  |
| A |  |  |  | T |  |  |  |  |  |  |  | L |  |  | U |  |  |  | M |  | A |  |  | R |  |  |  | O |  |
|  |  |  |  | I |  |  | 20  M | A | X | I | M | U | M |  | M |  |  |  | B |  | T |  |  | M |  |  |  | F |  |
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|  |  |  |  | N |  |  |  |  |  |  |  | I |  |  | E |  |  |  | R |  | C |  |  | L |  |  |  | Y |  |
|  |  |  |  |  | 21  V | E | R | T | E | X |  | O |  |  | R |  |  |  |  |  | F |  |  | A |  |  |  | M |  |
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|  |  |  |  |  |  |  |  |  | 22  C | O | N | S | T | A | N | T |  |  | 23  M | I | N | I | M | U | M |  |  | E |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | C |  |  |  |  |  |  | T |  |
|  |  |  |  |  |  |  |  |  |  |  | 24  C | O | M | P | L | E | T | I | N | G | T | H | E | S | Q | U | A | R | E |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  |  |  |  | Y |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 25  V | E | R | T | E | X | F | O | R | M |  |  |  |  |  |  |
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| **Across**  **2.** an expression with three terms  **3.** what is multiplied to the variable, x  **7.** where the line intercepts the x-axis.  **13.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_=0  **16.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, used for parabolas  **18.** the solutions to a quadratic equation  **19.** A perfect square, for example \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **20.** when a is negative, y-value of vertex, highest point on the parabola  **21.** where the axis of symmetry passes through, minimum/maximum in parabola. (written as coordinate)  **22.** "c" term in Quadratic Equation  **23.** when a is positive, y-value of vertex, lowest point on the parabola  **24.** putting the constant on the other side of the equation to make a perfect/factorable trinomial.  **25.** y=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ; translations to find vertex | **Down**  **1.** when the discriminant is positive  **4.** y=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ; gives you number of solutions  **5.** when the discriminant is 0  **6.** a bad boy couldn't decide whether or not to go to a raaaadical house party, he didn't want to be square and miss out on 4 awesome chicks. The party ended at 2 am. (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)  **8.** Square root of negative number; \_\_\_\_\_  **9.** a number that includes both a real and imaginary number.  **10.** symbol: \_\_\_\_\_\_\_ ; used to find perfect squares (ex. 8x8=64, \_\_\_\_\_\_)  **11.** when the discriminant is negative  **12.** a point/curved line equidistant to focus/directrix  **14.** the solutions to the quadratic formula  **15.** f(x) ; in form of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **17.** the x-value of the vertex, line that hits the parabola (line makes parabola symmetrical) |

   Quadratic Function       Parabola       Quadratic Equation       Zeros       Square Root       Complex Number       Completing the Square       Quadratic Formula       discriminant       Vertex       X-intercept       Roots       Axis of Symmetry       Standard Form       Vertex Form       Maximum       Minimum       Trinomial       Radical       No real solutions       Two real solutions       One real solution       Imaginary Number       Coefficients       Constant