$\qquad$
$\qquad$

## Quadratic



## Across

2. The process of converting a quadratic equation into a perfect square trinomial by adding or sultracting terms on both sides. 6. The process of writing an expression as a PRODUCT.
3. the original function hefore a transformation is applied
4. An expression that contains two terms being added, multiplied, or subtracted.
5. geometric property of figures that can be folded and each half matches the other exactly 16. What is the a value in $2 x^{\wedge} 2+3 x+5$
6. A quadratic function in which the vertex is a maximum. The function opens downward.
7. the point where the graph crosses the $y$ axis. Find it in the equation by setting $x=0$.
8. What is the $c$ value in $5 x^{\wedge} 2+2 x+3$
9. What form of quadratics is : $\mathrm{ax}^{\wedge} 2+\mathrm{bx}+\mathrm{c}=0$ 24. The property that states if the product of two numbers is $\mathbf{0}$, then at least one of the factors is $\mathbf{0}$. 25. trinomial whose factor form is the square of a binomial.
Down
10. Highest $y$ value of the parabola when " $a$ " is negative
11. $K=-h / 2 a$ used to find what,previously used answer
12. the solution[s] to a quadratic equation 5. The vertex of a concave up parahola. The lowest point on this parabola.
13. a function with a variable that is squared 8. An expression that contains three terms. 12. the shape of the graph of a quadratic function
14. The number in front of a variable 14. the term in a quadratic function with a variable raised to the first power-you won't see an exponent with the variable 15. the number without a variable in the quadratic function, this is also the $y$ intercept 17. Quadratic function in which the vertex is a minimums the function opens upwards. 18. the maximum or minimum value of the parahola.
15. the vertical line through the vertex that divides the parabola in half

Word Bank

| Concaveup | Vertex | Y-intercept | Roots | Perfect square |
| :--- | :--- | :--- | :--- | :--- |
| Maximum value | Parahola | Binomial | Linear term | Symmetry |
| Completing the square | Parent function | Quadratic Function | Two | Minimumvalue |
| Factoring | Axis of Symmetry | Constant term | Concave down | Trinomial |
| Zero product | Axis of Symmetry | Coefficient | Standard Form | Three |

