Name: $\qquad$ Date: $\qquad$ Period: $\qquad$

## Algebra 2 Semester 2



## Across

4. a solution is also known as a $\qquad$ of a function
5. statistical study of the relationship between variables
6. a solution is also known as a $\qquad$ of an equation
7. exponential function with a base smaller than 1 and greater than 0
8. another way to solve a quadratic function
9. a base 10 logarithm
10. quadratic equation in written as $y=a(x-$ h) ${ }^{\wedge} 2+k$
11. add to $y$, go $\qquad$
12. when factoring, this is the first step
13. exponential function with a base greater than 1
14. found with the formula $x=-b / 2 a$
15. degree 3 polynomial of 2 terms
16. there are $\qquad$ values for powers of $i$ that repeat in a cycle
17. transformation that moves all points the same distance and in the same direction 30. transformation when $a$ is negative Down
18. i squared
19. add to $x$, go
20. a $\qquad$ number has both a real part and an imaginary part
21. one way to solve a quadratic function 8. a function is a ratio of 2 polynomial functions
22. if $a<1$ in $y=a x^{\wedge} 2$
23. a method of dividing polynomial by a binomial in the form $x-a$ by using only the coefficients
24. a line that a graphed function approaches but does not touch
25. has a base of e
26. yet another way to solve a quadratic equation
27. to graph a $\qquad$ , reflect each point across the line $y=x$
28. sign of leading coefficient when a parabola opens downward
29. a polynomial with 3 terms
30. when a parabola opens upward, the $y$-coordinate of the vertex is called a $\qquad$
31. a description of the function values as $x$ approaches negative infinity and positive infinity

## Word Bank

root
negative one
growth
quadratic formula four
natural logarithm
high
cubic binomial trinomial left factoring inverse
common
vertex form
zero
graphing
GCF
synthetic division
common vertex form
zero
graphing
synthetic division
reflection asymptote translation end behavior negative vertical compression
decay rational regression axis of symmetry minimum complex

