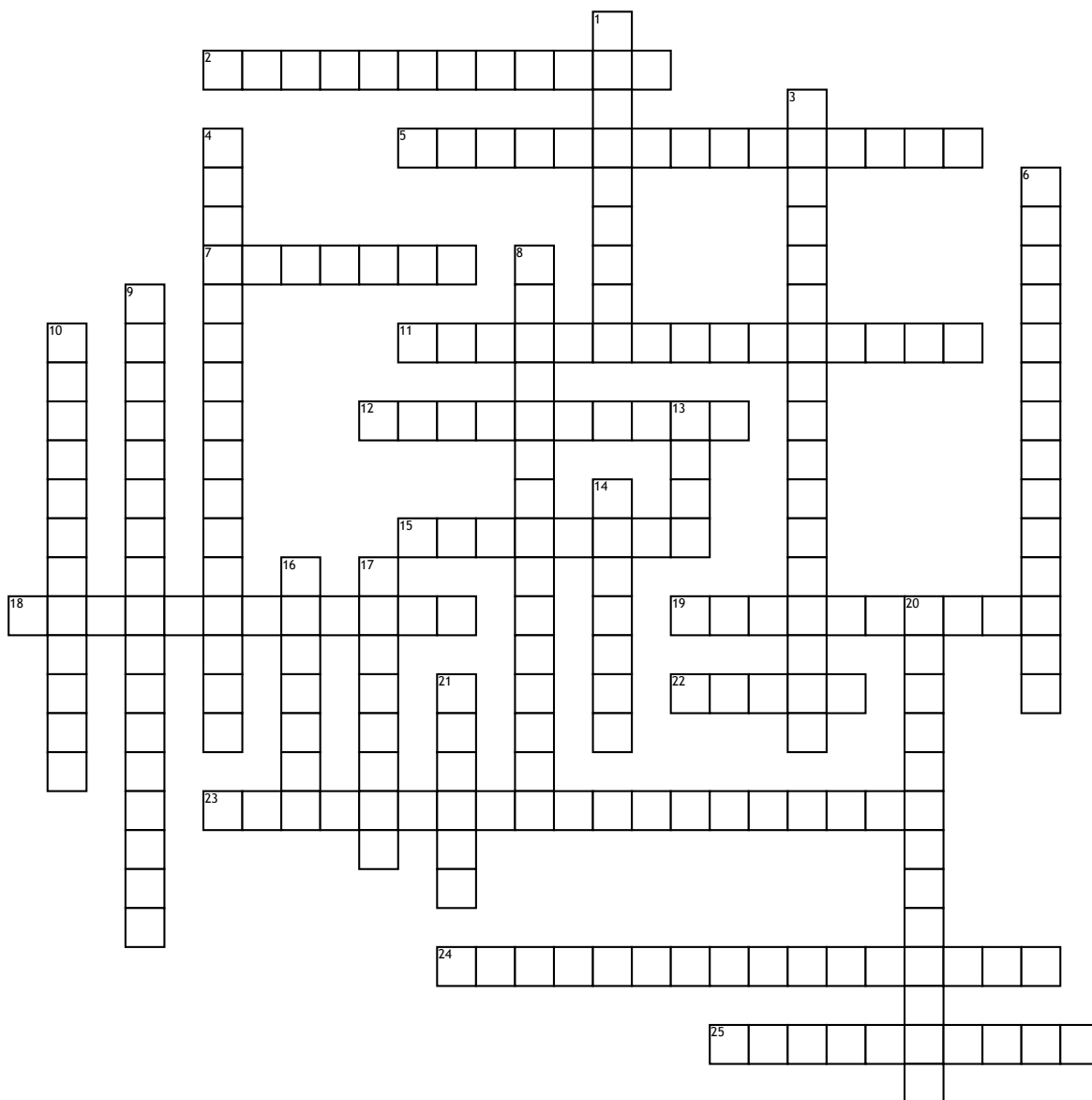


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Quadratics Crossword Puzzle



## 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.  $x = -b \text{ plus or minus the square root of } b^2 - 4ac \text{ divided by } 2a$  (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