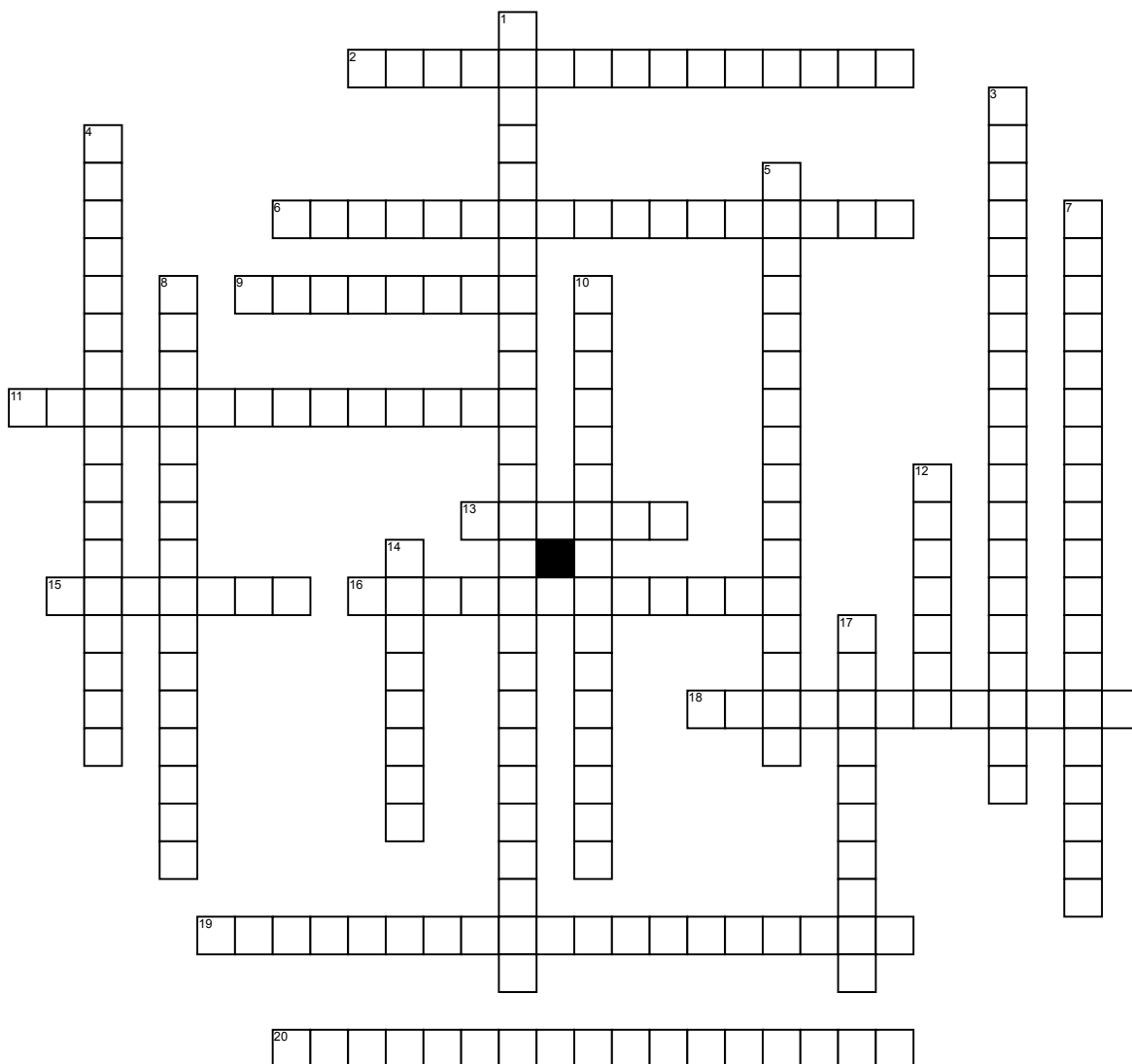


Chapter 8 & 9



Across

2. For the function f , any number x such that $f(x)=0$
 6. an exponential function of the form $f(x)=ab^x$ in which $b>1$
 9. The shape of the graph of a quadratic function
 11. a line that divides a plane figure or a graph into two congruent reflected halves
 13. The highest or lowest point on the parabola
 15. The y -value of the highest point on the graph of the function
 16. A ratio that compares the amount of change in a dependent variable to the amount of change in an independent variable
 18. b^2-4ac

19. A process used to form a perfect-square trinomial

20. A function that can be written in the form $f(x)= a$ or $x^2+ bx+ c$

Down

1. A system in which at least one of the equations is not linear
 3. The change in the value of a quantity divided by the elapsed time
 4. An equation that can be written in the form $ax^2+ bx+ c$, where a , b , and c are real numbers and a cannot = 0
 5. Interest earned or paid on both the principle and previously earned interest
 7. A function of the form $f(x)= ab^x$, where a cannot = 0, $b>0$, and b cannot = 1
 8. An exponential function of the form $f(x)=ab^x$ in which $0<b<1$

10. The formula which gives solutions, or roots, of $x^2+ bx+ c$ where a cannot = 0 ($-b \pm \sqrt{b^2-4ac} /2a$)

12. The y -value of the lowest point on the graph of the function

14. the time it takes for one-half of the substance to decay into another substance

17. quadratic function is given by. $f(x) = a(x - h)^2 + k$, where (h, k) is the vertex of the parabola