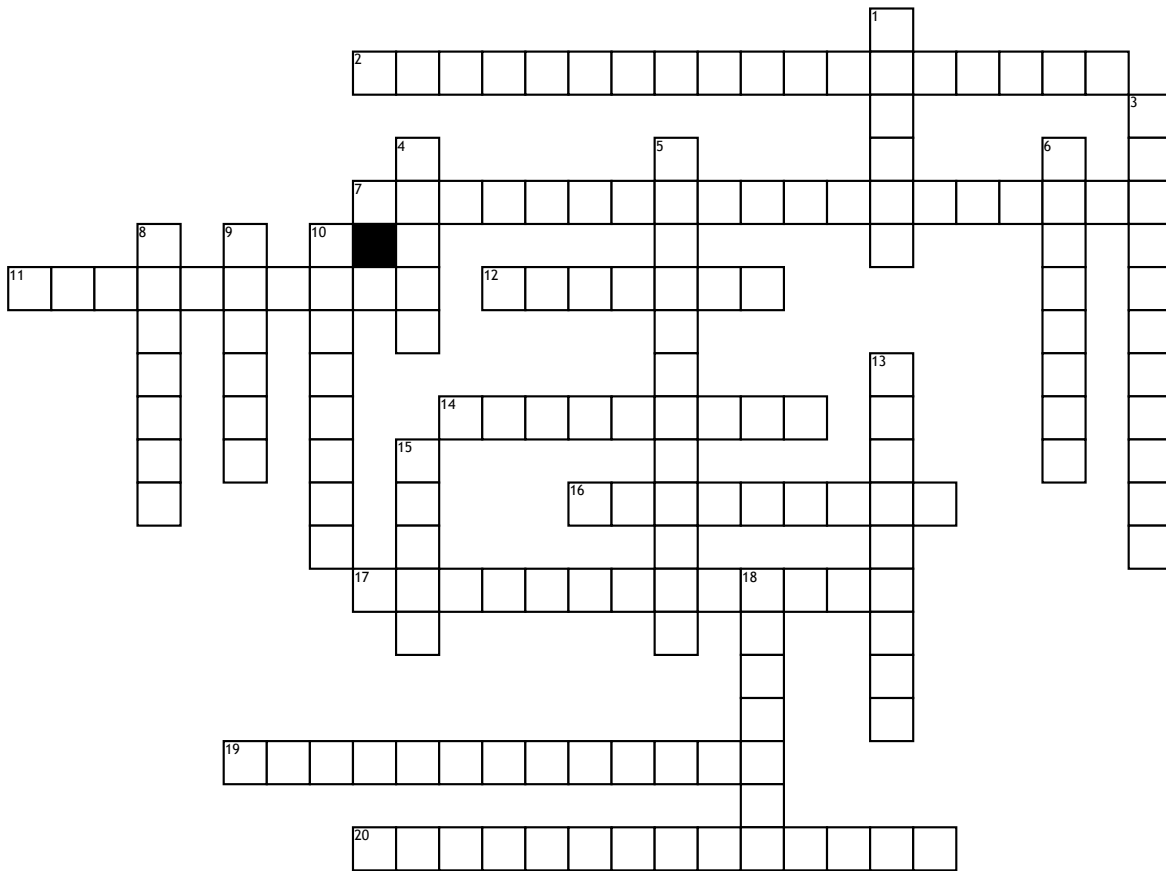


Quadratics Crossword Puzzle



Across

2. an equation containing a single variable of degree 2. Its general form is $ax^2 + bx + c = 0$, where x is the variable and a , b , and c are constants ($a \neq 0$).

7. a method, usually of solving quadratic equations, by which a quadratic expression, as $x^2 - 4x + 3$, is written as the sum or difference of a perfect square and a constant, $x^2 - 4x + 4 + 3 - 4 = (x - 2)^2 - 1$, by addition and subtraction of appropriate constant terms.

11. a quantity of which a given quantity is the square.

12. pertaining to or forming a root.

14. an expression that is a sum or difference of three terms, as $3x + 2y + z$ or $3x^3 + 2x^2 + x$.

16. so related as to be interchangeable in the enunciation of certain properties.

17. a mathematical expression ($a + bi$) in which a and b are real numbers and $i^2 = -1$.

19. is simply the way of writing the equation of a line so that the slope and y -intercept are immediately apparent.

20. a straight line for which every point on a given curve has corresponding to it another point such that the line connecting the two points is bisected by the given line.

Down

1. an arrangement of words, numbers, or signs, or combinations of them, as in parallel columns, to exhibit a set of facts or relations in a definite, compact, and comprehensive form

3. a number or quantity placed (generally) before and multiplying another quantity, as 3 in the expression $3x$.

4. a value of the argument of a function for which the function takes the value zero.

5. a relatively simple expression that determines some of the properties, as the nature of the roots, of a given equation or function.

6. a plane curve formed by the intersection of a right circular cone with a plane parallel to a generator of the cone; the set of points in a plane that are equidistant from a fixed line and a fixed point in the same plane or in a parallel plane.

8. greatest or highest possible or point

9. the point farthest from the base

10. a quantity assumed to be unchanged throughout a given discussion.

13. the act or process of separating an equation, formula, cryptogram, etc., into its component parts.

15. a mathematical value intermediate between positive and negative values.

18. the value of a function at a certain point in its domain, which is less than or equal to the values at all other points in the immediate vicinity of the point.