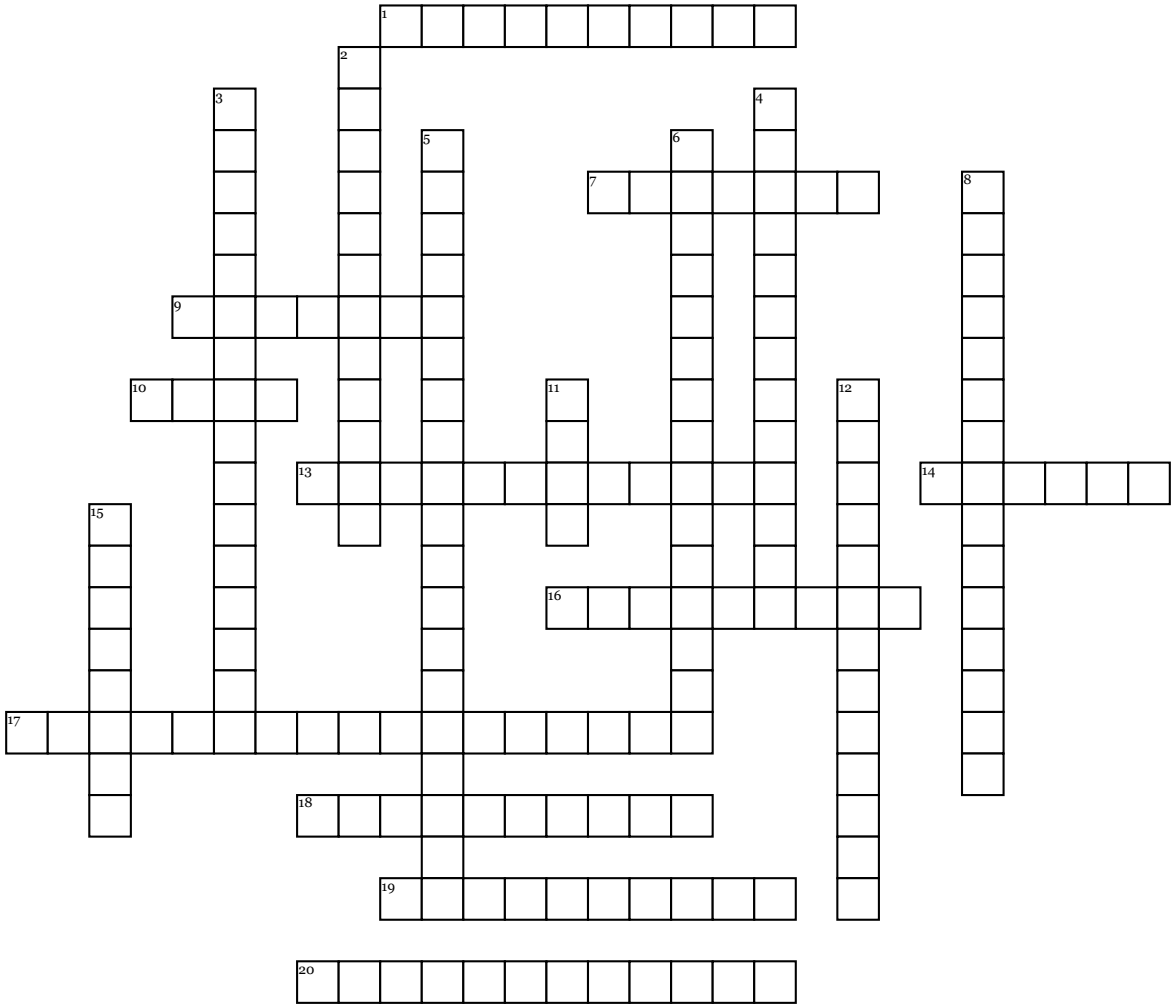
Name: _____ Date: _____ Period: _____

Quadratics crossword puzzle



Across

1. where the graph crosses the x-axis, and the y-intercepts are where the graph crosses the y-axis

7. value of a function is the place where the graph has a vertex at its lowest point

9. (√) symbol

10. First, Outer, Inner, Last. First means multiply the terms which occur first in each binomia

13. a line is in the form Ax + By = C where A is a positive integer, and B, and C are integers.

14. a corner or a point where lines meet.

16. an important process in algebra which is used to simplify expressions, simplify fractions, and solve equations.

17. the highest exponent of this function is 2. The standard form of a quadratic is y = ax^2 + bx + c, where a, b, and c are numbers and a cannot be 0

18. a number is a value that, when multiplied by itself, gives the number. Example: 4 × 4 = 16, so a square root of 16 is 4.

19. the common point to join the two line segments

20. The number D = b2 – 4ac determined from the coefficients of the equation ax2 + bx + c = 0.

Down

2. 6z means 6 times z, and "z" is a variable, so 6

3. the formula for determining theroots of a quadratic equation from its coefficients: .

4. a quantity of the form v + iw, where v and w are real numbers

5. a technique used to solve quadratic equations, graph quadratic functions, and evaluate integrals

6. it "discriminates" between the possible solutions

8. In 8^2 the "2" says to use 8 twice in a multiplication, so 82 = 8 × 8 = 64. In words: 82 could be called "8 to the power 2" or "8 to the second power

11. also sometimes called a root, of a real-, complex- or generally vector-valued function f is a member x of the domain of f such that f(x) vanishes at x; that is, x is a solution of the equation f(x) = 0.

12. if you square any Real Number you always get a positive, or zero, result. For example 2×2=4, and (-2)×(-2)=4 as well

15. a number on its own, or sometimes a letter such as a, b or c to stand for a fixed number