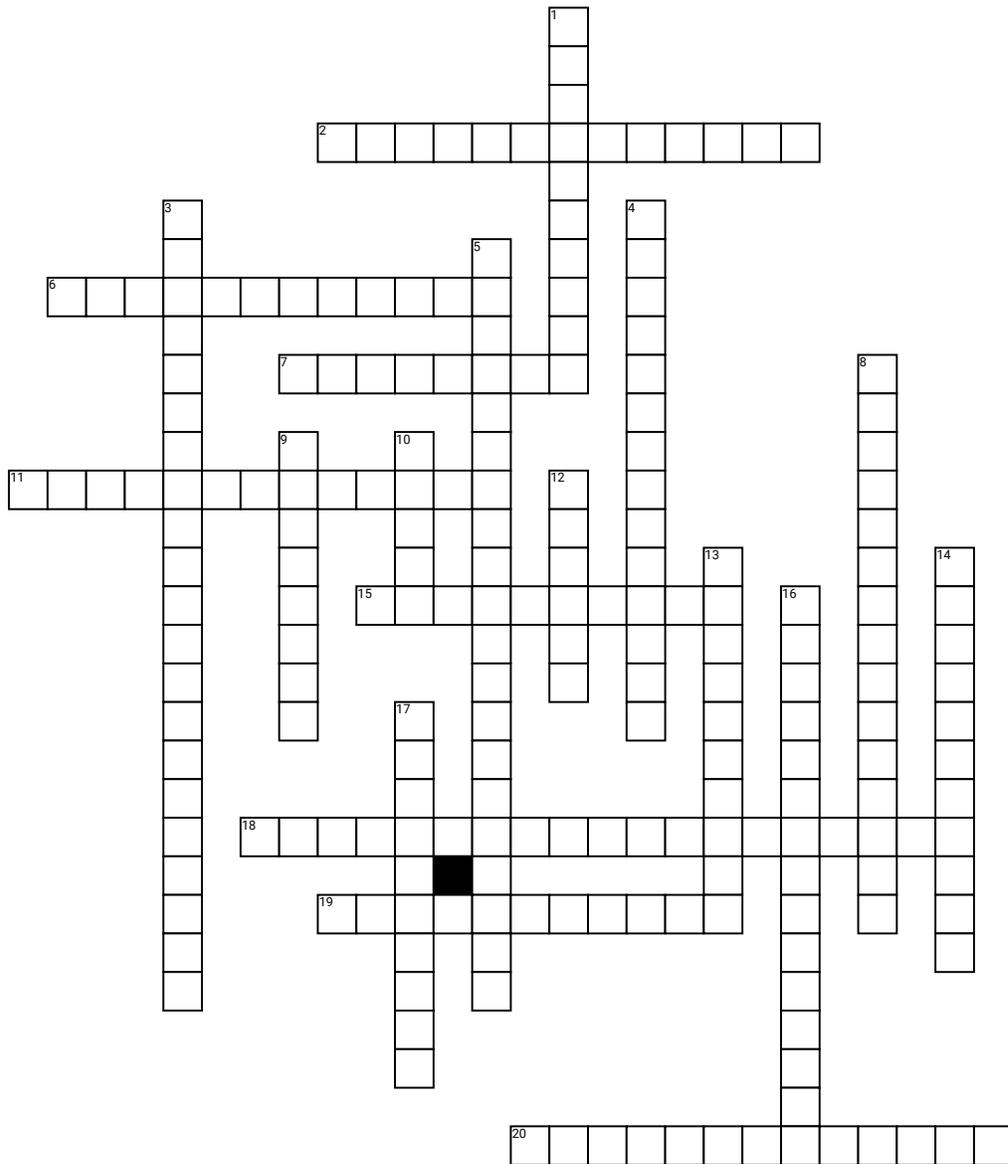# Calculus Crossword

Across

2. if a function is defined but not continuous then f is said to have a discontinuity at c. there are also two types, removable and non-removable.

6. the derivative of a constant in a function is zero. the will result in nothing when the derivative of the function is completed.

7. every y value corresponds to exactly one x value. in order for a function to be called this, it must satisfy the vertical and horizontal line tests.

11. use the second derivative test to find this. the second derivative test must result in a positive number.

15. a fundamental rule in calculus. this describes the functions instantaneous rate of change at any given time.

18. a test done to show where functions are increasing and decreasing. this test is also used when finding the relative extrema of a function.

19. the line that best approximates the slope of the graph at a point. use the limit process first and then plug in the x value of the given point to find the first coordinate.

20. the value that a functions is approaching which is less than the value of x. it approaches from the left side.

Down

1. a shape divided into different radii that add to one. also placed at the center of the cartesian plane.

3. the derivative of a position function. it is the velocity of an object at a specific moment in time.

4. the value that a functions is approaching which is greater than the value of x. it approaches from the right side.

5. test done to show where functions are concaving upward or downward. this test is also used to find points of inflection.

8. the point at which a function changes from increasing to decreasing or decreasing to increasing. in also describes the minimum or maximum of the function.

9. a relationship between two variables. one x value corresponds to exactly one y value.

10. set of all values of y for which the function is defined. y is seen as the dependent variable.

12. set of all values of x for which the function is defined. x is seen as the independent variable.

13. a straight line that joins two points on a function. also passes through two points on a curve.

14. the process of combining two functions. as a result, it can be called a composite function.

16. use the second derivative test to find this. the second derivative test must result in a negative number.

17. a function is continuous when certain conditions are true. 1. f(c) is defined, 2. if the limit exists , and 3. if the limit is equal to f(c).