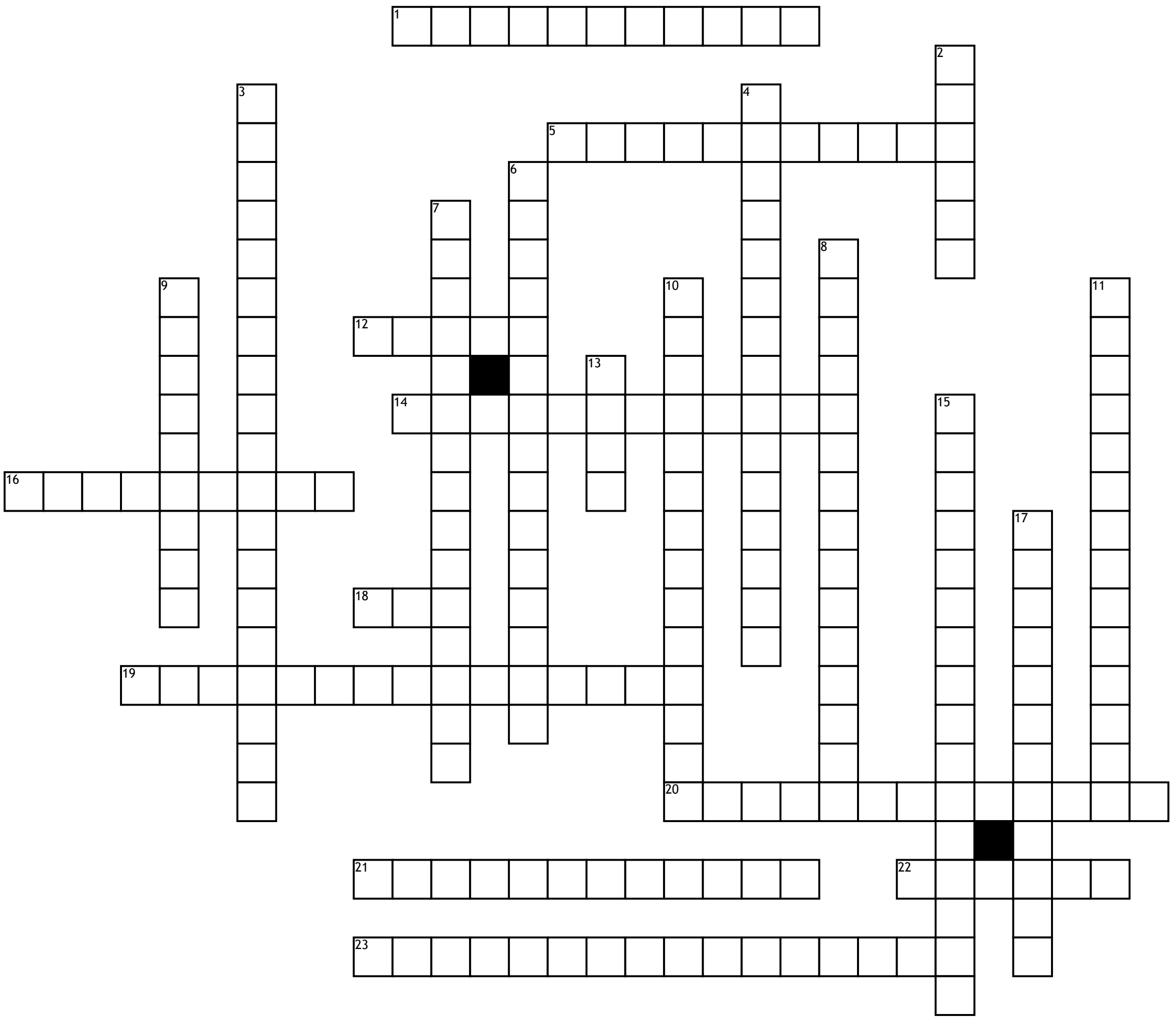
Name: ______________________________ Date: ________

Calculus



Across

1. An algorithm within the calculus to find the derivative of the Product of two functions.
5. adheres to this property: f(-x) = -f(x).
12. $(y_2-y_1)/(x_2-x_1)$
14. [(f'(x) g(x)) - ((f(x) g'(x))] / (g(x))^2
16. A simple device in calculus to determine the derivative of a monomial.
18. derivative of ln(x)
19. The lowest point on a graph, especially over a specified domain
20. Let f be continuous on [a,b] and differentiable on (a,b) and if f(a)=f(b) then there is at least one number c on (a,b) such that f'(c)=0 (If the slope of the secant is 0, the derivative must = 0 some
21. derivative of sec(x).
22. derivative of sin(x).
23. A Derivative taken of a first Derivative

Down

2. derivative of cos(x).
3. If f is continuous on [a,b] then f has an absolute maximum and an absolute minimum on [a,b]. The global extrema occur at critical points in the interval or at endpoints of the interval.
4. switch x and y
6. A change in concavity
7. The highest point on a graph, especially over a specified domain
8. When approximating an integral in calculus we may treat each partition as a Trapezoid to determine the area under the curve.
9. a basic rule in calculus to find the derivative of a composite function
10. If f'(c)=0 or does not exist, and c is in the domain of f, then c is a critical number. (Derivative is 0 or undefined)
11. Given a function with a derivative, the antiderivative of that derivative function returns the original function.
13. derivative of a constant
15. The instantaneous rate of change will equal the mean rate of change somewhere in the interval. Or, the tangent line will be parallel to the secant line.
17. derivative of csc(x).