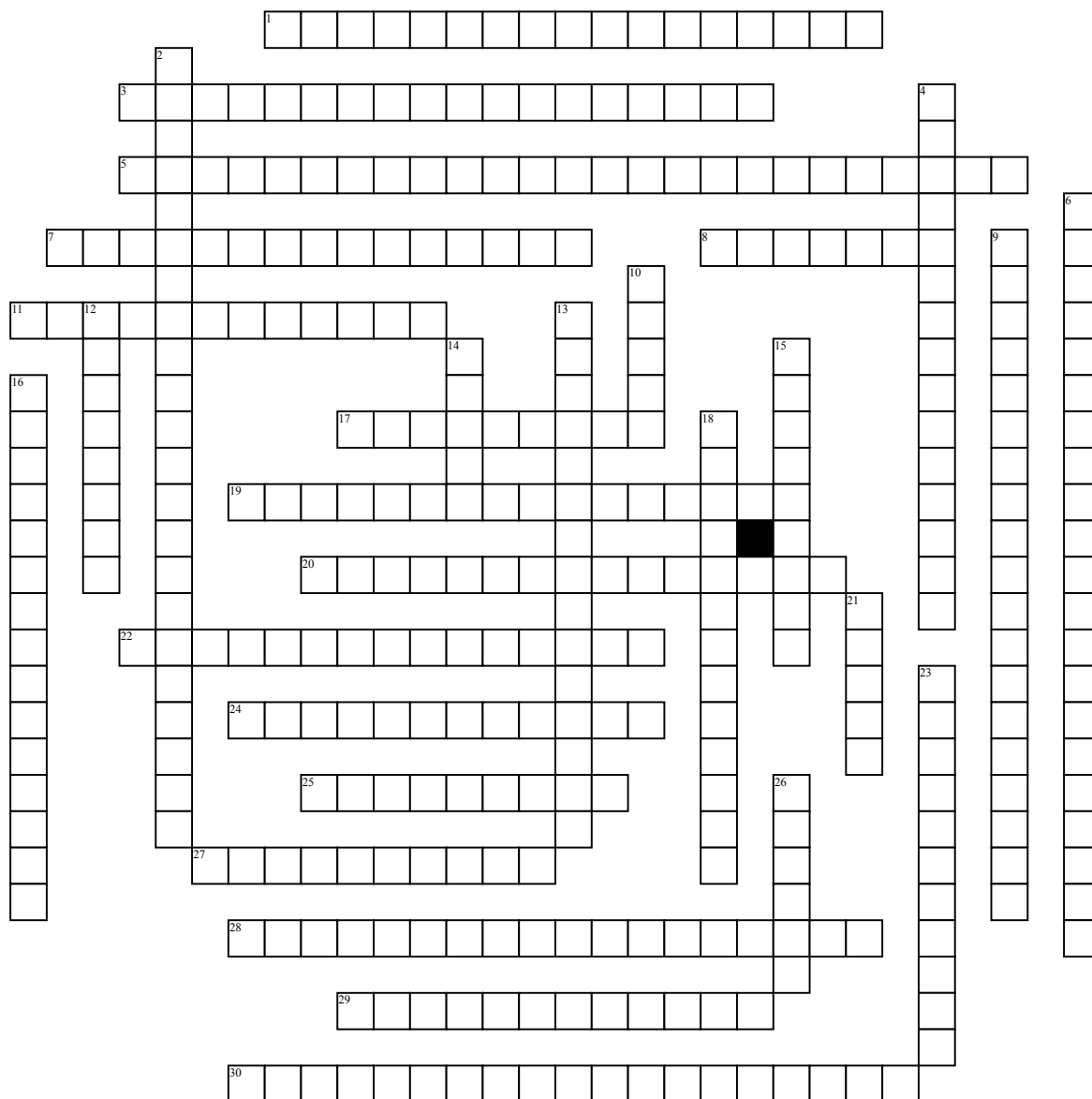# calc extra credit

Across

1. The point where the concavity of a function changes.
3. Function that is falling from left to right.
5. Vertical asymptote
7. The lowest point in a particular section of the graph
8. A line that touches a curve at a point without crossing the curve
11. A point on the graph where there is a peak or valley.
17. average rate of change
19. Average rate of change of position function. Rate of change of distance over time.
20. The highest point of the graph.
22. The process of finding the derivative.
24. A process that maximizes or minimizes a quantity
25. 2nd derivative is positive.
27. Gives formula to find slope of tangent line to a curve at any point on curve.
28. Function that is rising from left to right.
29. The first derivative of the velocity function with respect to time.
30. If f is continuous on [a,b], then there is a max and a min

Down

2. hole in the graph
4. Point where tangent line intersects curve
6. Derivative of position function. Velocity
9. Allows you to find where functions are increasing and decreasing. Also allows you to find relative extrema.
10. y-values (Outputs)
12. The mathematical study of change.
13. The lowest point of the graph.
14. As x approaches a number, what is f(x) approaching.
15. The derivative of a composition is the derivative of the "outside" times the derivative of what's "inside."
16. The highest point in a particular section of the graph
18. A point on the graph of the function at which the derivative is either zero or undefined.
21. A line segment between two points on a curve.
23. 2nd derivative is negative.
26. X-values (inputs)