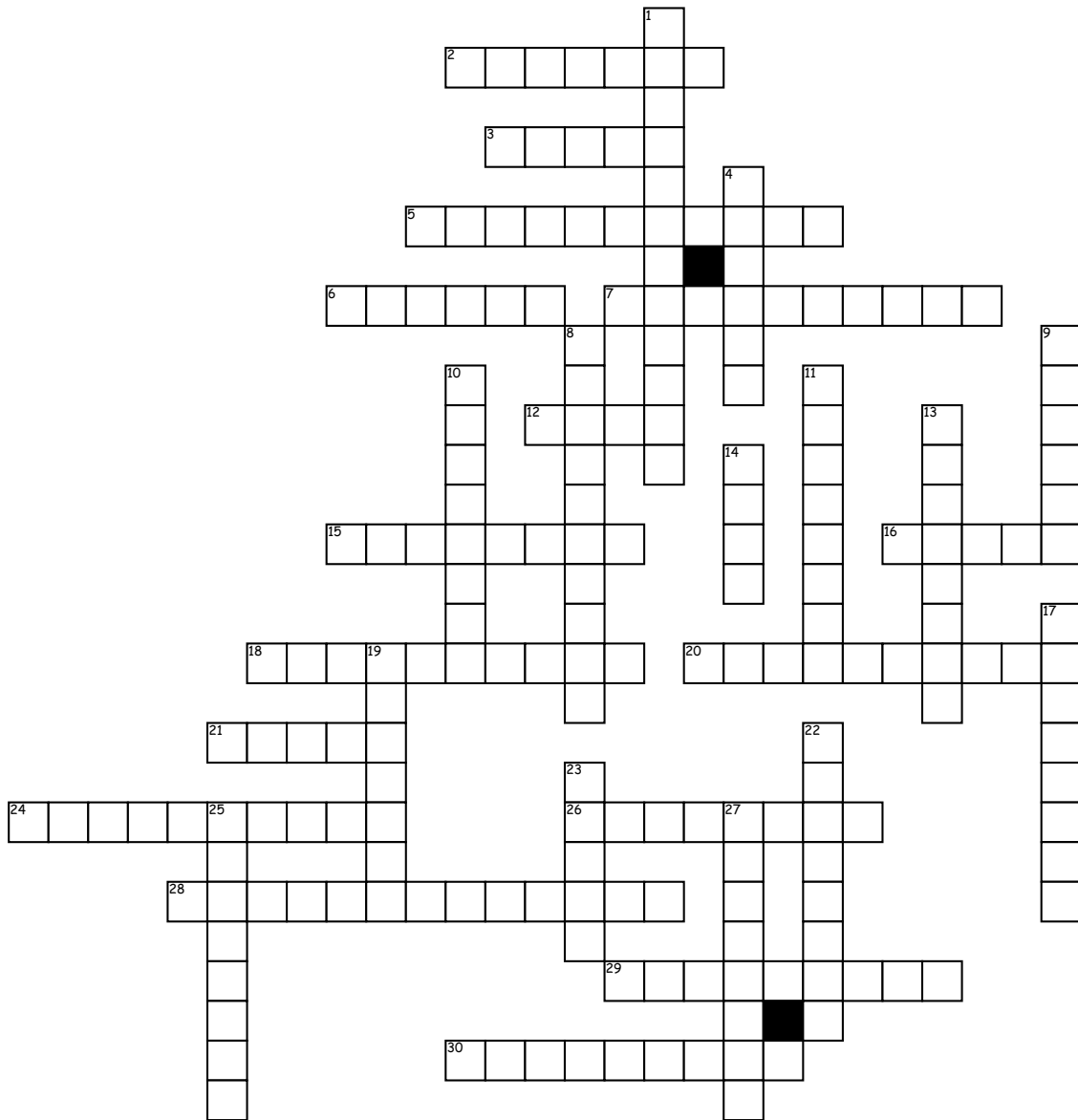


Calculus Crossword Puzzle



Across

2. _____ rule to differentiate a function that contains multiplication of 2 other functions

3. how fast a function is increasing or decreasing

5. if $f''(x) < 0$ on a set interval the function is _____ on that interval

6. derivative of $\sin(x)$

7. if a variable is raised to another variable, take the _____ of both sides

12. derivative of a constant

15. _____ rule to differentiate a function composed of a function divided by another function

16. $d/dx (x^n) = nx^{(n-1)}$ is the _____ rule

18. a curve that is uninterrupted

20. Point of _____; curve changes concavity

21. _____ rule used to differentiate composite functions

24. rate of change of a function

26. _____ differentiation by separating variables

28. a form of integration using the chain rule in reverse

29. theorem stating if $f(x)$ is defined, continuous, and differentiable on interval $[a,b]$, then there is a c such that $a < c < b$

30. a line or curve that a function approaches without ever reaching

Down

1. the derivative of velocity

4. can be found using disk/ washer methods

8. estimate of the area of a function using rectangles

9. method of finding volume by subtracting the volume of the outer solid minus the value of the inner solid

10. integral of velocity

11. rule used when top and bottom equal zero

13. the derivative of position

14. similar method as the washer method

17. it expresses the area under a curve

19. a line that touches a curve at a point without crossing it

22. point or points where the derivative equals zero

23. a value that a function approaches as an input approaches some value

25. highest or lowest point on the graph; _____ max/min

27. limits can approach any value including positive or negative