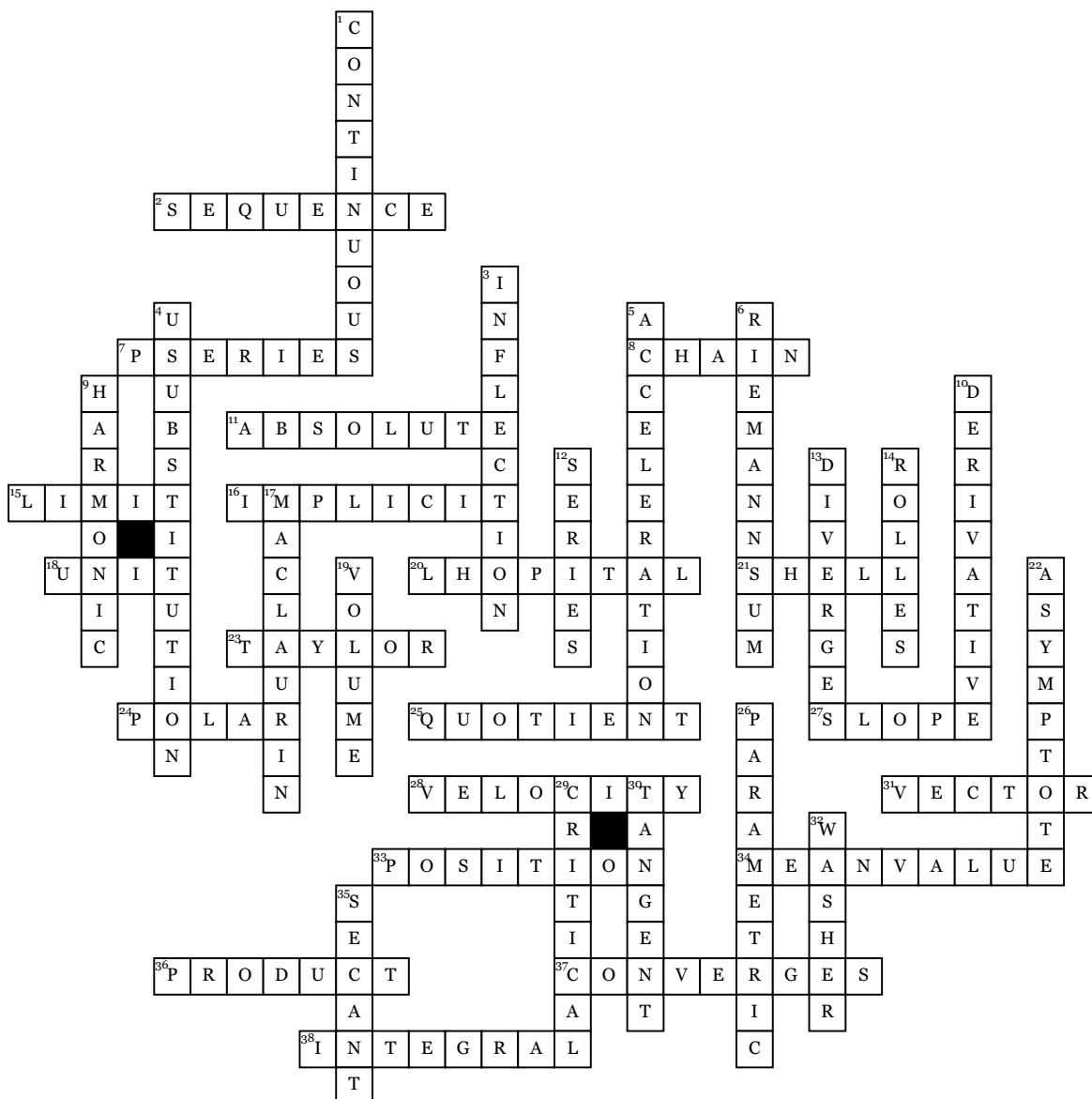


Calculus



Across

2. list of numbers written in a specific order
7. test to determine convergence of a power series
8. rule used to differentiate composite functions
11. highest or lowest point on the graph; _____ max/min
15. a value that a function approaches as an input approaches some value
16. differentiation by separating variables
18. a vector of length one along an axis
20. rule used to evaluate indefinite forms of limits
21. method of finding volume using cylindrical layers
23. a series of a function represented as an infinite sum of terms
24. an equation of a curve in terms of r and θ
25. rule to differentiate a function composed of a function divided by another function
27. how fast a function is increasing or decreasing

28. the derivative of position

31. a quantity with magnitude and direction

33. integral of velocity

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

36. rule to differentiate a function that contains multiplication of two other functions

37. approaches a definite limit

38. area under a curve

Down

1. a curve that is uninterrupted

3. point of _____; curve changes concavity

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

5. the derivative of velocity

6. approximation of the area of a function using rectangles under the curve

9. series shown by

10. slope or rate of change of a function

12. sum of terms in a sequence

13. increases to infinity

14. theorem stating that a differentiable function that has equal values at point a and point b must have point c with a slope of zero

17. a Taylor Series centered around zero

19. can be found using Disk/Washer/Shell methods

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

26. a function that uses two equations to describe a curve

29. point(s) at which the derivative equals zero

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

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

35. a straight line joining two points on a function's curve