## Calculus



## Across

2. list of numbers written in a specific order 7. test to determine convergence of a power series
3. rule used to differentiate composite functions
4. highest or lowest point on the graph; $\qquad$ max/min
5. a value that a function approaches as an input approaches some value
6. differentiation by separating variables
7. a vector of length one along an axis
8. rule used to evaluate indefinite forms of limits 21. method of finding volume using cylindrical layers
9. a series of a function represented as an infinite sum of terms
10. an equation of a curve in terms of $r$ and $\Theta$
11. rule to differentiate a function composed of a function divided by another function 27. how fast a function is increasing or decreasing
12. the derivative of position
13. a quantity with magnitude and direction 33. integral of velocity
14. theorem stating if $f(x)$ is defined, continuous, and differentiable on interval [a,b], then there is a c such that $\mathrm{a}<\mathrm{c}<\mathrm{b}$
15. rule to differentiate a function that contains multiplication of two other functions
16. approaches a definite limit
17. area under a curve

## Down

1. a curve that is uninterrupted
2. point of $\qquad$ ; curve changes concavity
3. a form of integration using the chain rule in reverse
4. the derivative of velocity
5. approximation of the area of a function using rectangles under the curve
6. series shown by
7. slope or rate of change of a function
8. sum of terms in a sequence
9. increases to infinity
10. 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
11. a Taylor Series centered around zero
12. can be found using Disk/Washer/Shell methods
13. a line or curve that a function approaches without ever reaching
14. a function that uses two equations to describe a curve
15. point(s) at which the derivative equals zero
16. a line that touches a curve at a point without crossing it
17. method of finding volume by subtracting the volume of the outer solid minus the volume of the inner solid
18. a straight line joining two points on a
function's curve
