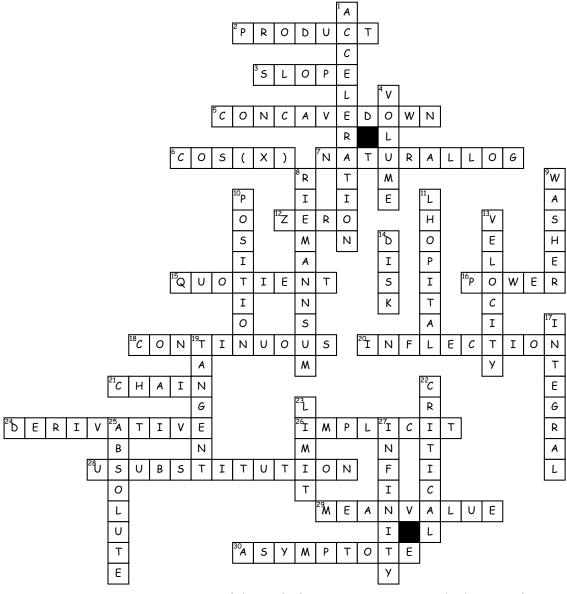
## Calculus Crossword Puzzle



## **Across**

- rule to differentiate a function that contains multiplication of 2 other funtions
- 3. how fast a function is increasing or decreasing
- 5. if f''(x) < 0 on a set interval the function 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
- 18. a curve that is uninterrupted
- \_\_; curve changes 20. Point of concavity
- rule used to differentiate composite functions

- 24. rate of change of a function
- 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 a c such that a<c<b
- 30. a line or curve that a function approaches without ever reaching

- 1. the derivative of velocity
- 4. can be found using disk/ washer methods
- 8. estimate of the area of a function using
- 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

- 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