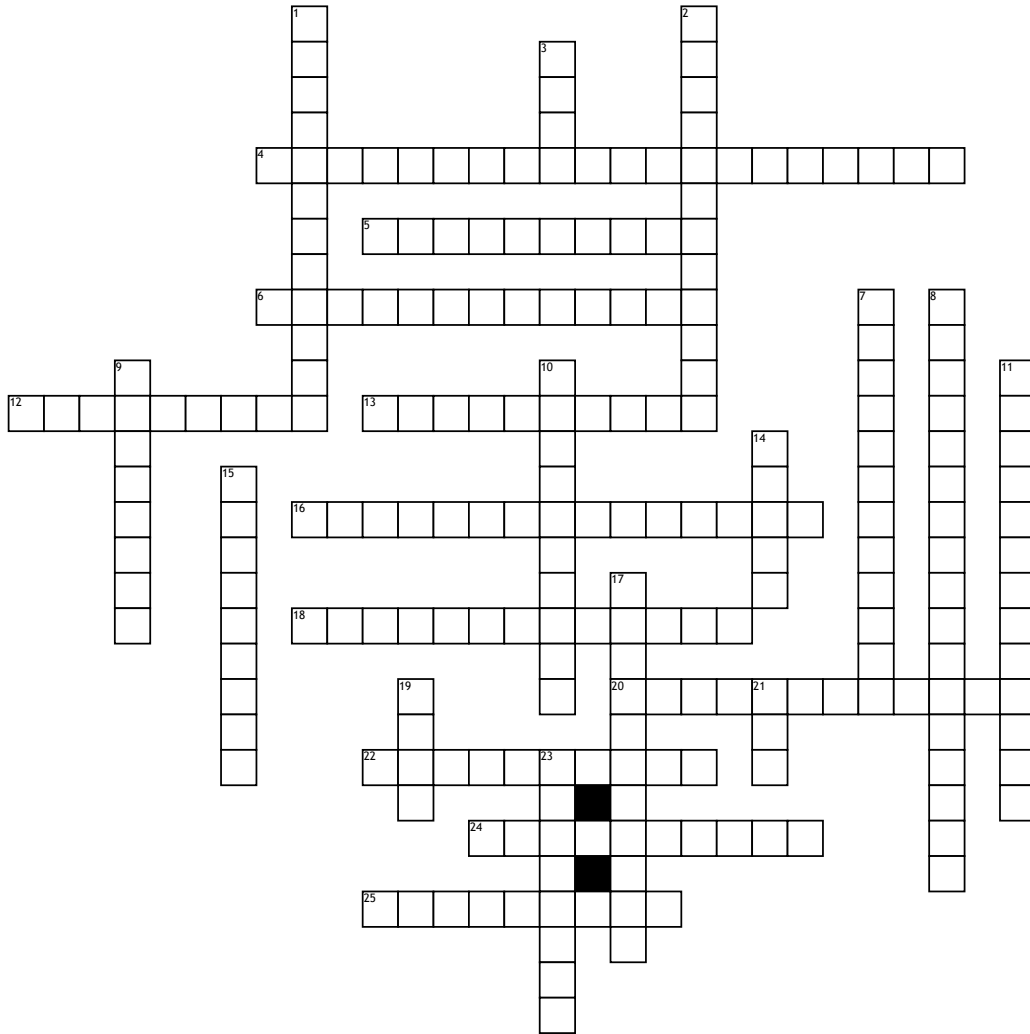


Name: _____

Calculus Word Search #1



Across

- 4. An equation showing a relationship between a function and its derivatives.
- 5. an approximation that takes the form $\sum f(x)dx$
- 6. A point on the graph of a function at which the derivative is either 0 or undefined.
- 12. The formula for finding the derivative of a power of a variable.
- 13. A technique for finding the volume of a solid of revolution (volume by parallel cross-sections)
- 16. Maximum or minimum
- 18. A method for approximating a definite integral using linear approximations of f .
- 20. A net change in position.

- 22. A circle with a radius of one. It is used to understand sines and cosines of angles found in right triangles.

- 24. a logarithm to the base e

- 25. $f'(g(x))g'(x)$

Down

- 1. A formula for the derivative of the quotient of two functions
- 2. volume of a solid of revolution of a solid-state material when integrating along the axis of revolution.
- 3. The integral of $\sin x$ from 0 to t equals _____
- 7. Slope of a function
- 8. A point where the graph has a tangent line and the concavity changes

- 9. The rate of change of position with respect to time

- 10. The derivative of a function is negative when the function is _____

- 11. An integration method that essentially involves using the chain rule in reverse.

- 14. The value that a function approaches as the domain variable approaches a specific value.

- 15. A function that is defined by applying different formulas to different parts of its domain is a _____ function

- 17. $d/dx(uv) = u(dv/dx) + v(du/dx)$

- 19. The derivative of $-\cos x$

- 21. The antiderivative of $1/x$

- 23. The set of all real numbers between two given numbers.

Word Bank

- | | | | | |
|----------------|-------------|-----------------------|---------------------|----------------|
| U-Substitution | limit | Differential Equation | relative extreme | rate of change |
| displacement | decreasing | critical point | sint | Quotient Rule |
| natural log | power rule | chain rule | point of inflection | washer method |
| Trapezoid Rule | Riemann Sum | product rule | velocity | unit circle |
| ln x | piecewise | sin x | interval | Disk Method |