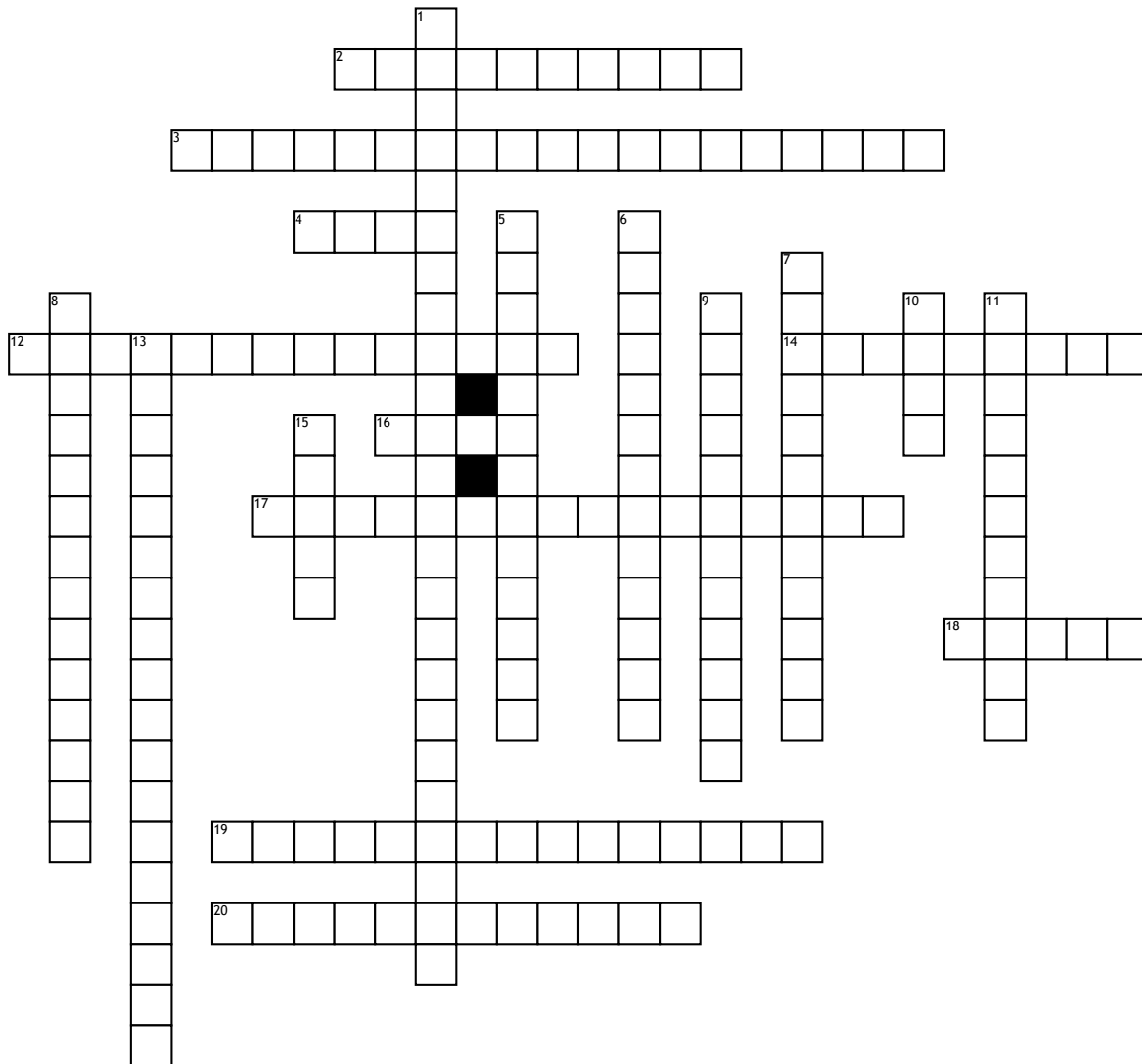


Calculus Crossword



Across

- 2. 1. $\lim_{x \rightarrow c} f(x)$ exists. 2. $f(c)$ exists. 3. $\lim_{x \rightarrow c} f(x) = f(c)$
- 3. If f is continuous on the closed interval $[a, b]$, then f has both a maximum and a minimum on the interval.
- 4. Left-hand endpoint approximation
- 12. Best day of the year other than pi day
- 14. $\frac{d}{dx} f(g(x)) = f'(g(x)) g'(x)$
- 16. The integral on (a, b) of $f(x) dx = F(b) - F(a)$
- 17. $f'(c) = (f(b) - f(a)) / (b - a)$

18. Another way to spell something that holds or supplies oil.

19. A point in the interior of the domain of a function f at which $f' = 0$

20. Low d'high minus high d'low all over the square of what's below

Down

1. If f is continuous on the closed interval $[a, b]$ and k is any number between $f(a)$ and $f(b)$ then there is at least one number c in $[a, b]$ such that $f(c) = k$

5. a point in the interior of the domain of a function f at which $f' = 0$ or f' does not exist

6. Let f be continuous on the closed interval $[a, b]$ and differentiable on the open interval (a, b) . If $f(a) = f(b)$ then there is at least one number c in (a, b) such that $f'(c) = 0$

7. derivative of velocity

8. logistic differential equation

9. Second derivative of position

10. derivative of $-\cos x$ and antiderivative of $\cos x$

11. $\frac{d}{dx} (f(x) g(x)) = f(x)g'(x) + g(x) f'(x)$

13. $uv - \int v du dx$

15. Absolute value of velocity