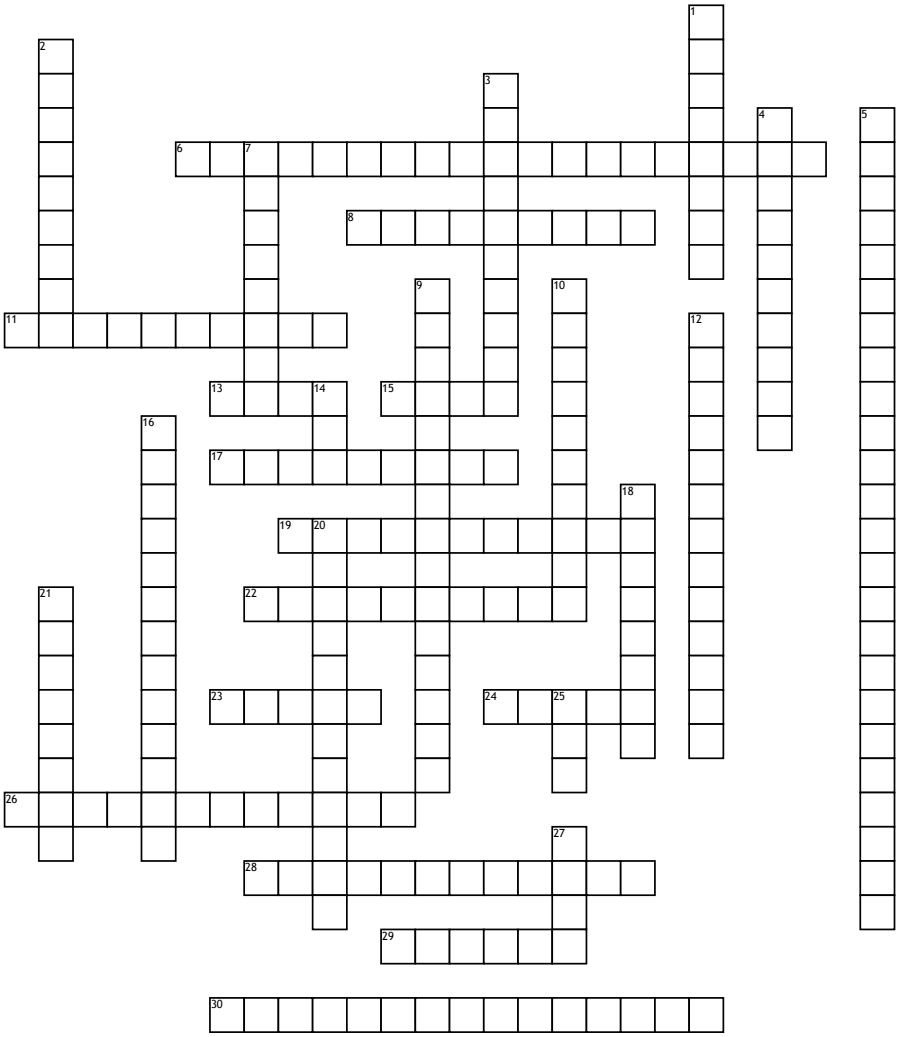
Name: _____ Date: _____ Period: _____

AP Calculus AB Crossword



Across

6. F(x)=f(a)+f'(a)(x-a)
8. Rate at which the slope is changing
11. The instantaneous rate of change of a function
13. lim x->0 (cosx-1)
15. 1/3(πr^2)h
17. x^2 -> 2x^2-1 -> 2x
19. A line that touches a curve at one point
22. f'(x) is negative
23. The absolute value of velocity
24. The value that a function or sequence "approaches" as the input or index approaches some value.
26. Finding a rate at which a quantity changes by relating that quantity to other quantities whose rates of change are known
28. (vu'-uv')/v^2
29. 4/3(πr^3)
30. What does f^-1represent?

Down

1. If velocity and acceleration have the same sign, then the speed is _____.
2. (F*G)'(x)=f'(g(x))*g'(x)
3. Perpendicular to a tangent line
4. x = a if the value of f(a) matches the predicted value coming from the limit as x → a
5. if f(x) is continuous, then every value between f(a) and f(b) must exist
7. If velocity and acceleration have different signs, then the speed is _____.
9. Only occur at critical points or end points of a continuous function
10. f'(x) is positive
12. Using "u" finding "du", spotting it in the integral, replacing it and solving. After taking the integral, re-substitute "u".
14. lim x->0 (sinx/x)
16. Where a derivative does not exist
18. Derivative of the position function
20. The derivative of velocity
21. (πr^2)h
25. f(x) is continuous in the interval [a, b] and differentiable in the interval (a, b)
27. x^3

Word Bank

Power rule	Quotient rule	Cube	Decreasing	Velocity
Negative	Derivative	MVT	Normal Line	Acceleration
Tangent line	Increasing	Discontinuity	Concavity	Cylinder
Limit	Continuous	Linear approximation	Intermediate value theroem	U-substitution
zero	Cone	Imverse function	Chain rule	Positive
Related rates	Speed	Sphere	Absolute max/min	One