73. Match each numbered item with a lettered item. (There are more lettered items than numbered items. Some lettered items don't match any numbered item.)

1. Definition of $\lim_{x \to a} f(x) = L$.
2. Definition of $\lim_{x \to a^+} f(x) = L$.
3. Definition of $\lim_{x \to \infty} f(x) = L$.
4. Definition of "f is continuous at a".
5. The Intermediate Value Theorem.
6. Definition of the derivative of f at a.
7. Definition of a differentiable function f at a.
8. Theorem relating differentiability and continuity.
9. The power rule for differentiation.
10. Definition of the differential.
11. Definition of a function f having an absolute maximum at c.
12. Definition of a function f having a local maximum at c.
13. The Extreme Value Theorem.
14. Definition of a function that is increasing on an interval I.
15. The Mean Value Theorem.
16. Definition of an antiderivative of f on an interval I.

A. $\lim_{x \to a} f(x) = f(a)$.

B. For every $\epsilon > 0$ there is a corresponding number N such that $|f(x) - L| < \epsilon$ whenever $x > N$.

C. If f is continuous on the closed interval $[a, b]$, and N is a number strictly between $f(a)$ and $f(b)$, then there exists a number c in (a, b) such that $f(c) = N$.

D. The limit $\lim_{h \to 0} \dfrac{f(a+h) - f(a)}{h}$ exists.

E. If f is differentiable at a, then f is continuous at a.

F. If f is continuous at a, then f is differentiable at a.

G. $\dfrac{d}{dx} x^n = nx^{n-1}$.

H. The function g has the property $g'(x) = f(x)$ for all x in I.

I. $\lim_{h \to 0} \dfrac{f(a+h) - f(a)}{h}$

J. $f(c) \geq f(x)$ for all x in the domain of f.

K. For every $\epsilon > 0$ there is a corresponding number $\delta > 0$ such that $|f(x) - L| < \epsilon$ whenever $a < x < a + \delta$.

L. For every $\epsilon > 0$ there is a corresponding number $\delta > 0$ such that $|f(x) - L| < \epsilon$ whenever $0 < |x - a| < \delta$.

M. There is an open interval I containing c such that $f(c) \geq f(x)$ for all x in I.

N. $f'(x) > 0$ for all x in I.

O. If f is continuous on $[a, b]$ then there are numbers c and d in $[a, b]$ such that $f(c)$ is an absolute maximum for f in $[a, b]$ and $f(d)$ is an absolute minimum for f in $[a, b]$.

P. If f is differentiable, $dy = f'(x)dx$.

Q. $f(x_1) < f(x_2)$ whenever $x_1 < x_2$ in I.

R. If f is continuous on $[a, b]$ and differentiable in (a, b), then there is a number c in (a, b) such that

$$f'(c) = \frac{f(b) - f(a)}{b - a}.$$