Name _____

AB Memory Quiz 2

Complete the statement on the left with a statement from the right.

_____ 1. Limit Definition of the Derivative

_____ 2. Power Rule

_____ 3. $\frac{d}{dx}\left[\frac{1}{x}\right]$

_____ 4. Particle is moving left/down because

_____ 5. Particle is speeding up (|velocity| is getting bigger) because

_____ 6. $\frac{d}{dx}[\tan x]$

_____ 7. $\frac{d}{dx}[\sec x]$

_____ 8. $\frac{d}{dx}[\arcsin]$

_____ 9. $\frac{d}{dx}[\ln x]$

_____ 10. Using 2nd derivative: f has a relative max b/c

_____ 11. Using 2nd derivative: f has a relative min b/c

_____ 12. $f(x)$ is concave up b/c

_____ 13. $f(x)$ is concave down b/c

_____ 14. $\int \frac{1}{x}dx$

_____ 15. $\int_a^b f'(x)dx$

A. $f(b)-f(a)$

B. $\sec^2 x$

C. $\frac{d}{dx}\left[x^n\right]=nx^{n-1}$

D. $\sec x \tan x$

E. $v(t)<0$ (negative)

F. $f'(c)=0$ (or und) and $f''(x)<0$

G. $\frac{1}{\sqrt{1-x^2}}$

H. $-\frac{1}{x^2}$

I. $\ln x + C$

J. $\frac{1}{x}$

K. $v(t)$ and $a(t)$ have same signs.

L. $f''(x)>0$.

M. $f'(x)=\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$

N. $f''(x)<0$

O. $f'(c)=0$ (or und) and $f''(x)>0$