AP Calculus Name:_____

Differentiation Rules Benchmark Period:_____ Date:_____

1.	c is a constant $\frac{d}{dx}[c \cdot u]$	
2.	$\frac{d}{dx}[u \pm v]$	
3.	$\frac{d}{dx}[uv]$	
4.	$\frac{d}{dx}\left[\frac{u}{v}\right]$	
5.	$\frac{d}{dx}\left[f\left(g\left(x\right)\right)\right]$	
6.	c is a constant $\frac{d}{dx}[c]$	
7.	$\frac{d}{dx}\left[u^n\right]$	
8.	$\frac{d}{dx}[x]$	
9.	$\frac{d}{dx}[\lvert u \rvert]$	
10.	$\frac{d}{dx}\left[\sin\left(u\right)\right]$	
11.	$\frac{d}{dx}\left[\cos\left(u\right)\right]$	
12.	$\frac{d}{dx}\left[\tan\left(u\right)\right]$	
13.	$\frac{d}{dx}\left[\csc\left(u\right)\right]$	

14.	$\frac{d}{dx}\left[\sec(u)\right]$	
15.	$\frac{d}{dx}\left[\cot(u)\right]$	
16.	$\frac{d}{dx}\left[\ln(u)\right]$	
17.	$\frac{d}{dx}\left[e^{u}\right]$	
18.	$\frac{d}{dx}\left[\log_{a}(u)\right]$	
19.	$\frac{d}{dx}\left[a^{u}\right]$	
20.	$\frac{d}{dx}\left[\arcsin(u)\right]$	
21.	$\frac{d}{dx}\left[\arctan(u)\right]$	
22.	$\frac{d}{dx}\left[\operatorname{arcsec}(u)\right]$	
23.	$\frac{d}{dx}\left[\arccos(u)\right]$	
24.	$\frac{d}{dx}\left[\operatorname{arccot}(u)\right]$	
25.	$\frac{d}{dx}\left[\operatorname{arccsc}(u)\right]$	
26.	$\left(f^{-1}\right)'(a)$	