AP Calculus Name:_____

Differentiation Rules Benchmark # 5 Period:_____ Date:_____

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

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