AP Calculus Name:_____

Differentiation Rules Benchmark # 2 Period:_____ Date:_____

1.	$\frac{d}{dx}\left[f(x)\pm g(x)\right]$	
2.	$\frac{d}{dx}\left[q(x)^n\right]$	
3.	$\frac{d}{dx}\left[\frac{p(x)}{q(x)}\right]$	
4.	c is a constant $\frac{d}{dx}\left[c\cdot g(x)\right]$	
5.	$\frac{d}{dx}\left[g\left(f(x)\right)\right]$	
6.	$\frac{d}{dx}\left[\sin\left(t(x)\right)\right]$	
7.	$\frac{d}{dx}\left[\cot\left(r(x)\right)\right]$	
8.	$\frac{d}{dx}\left[w(x)\cdot d(x)\right]$	
9.	$\frac{d}{dx}\left[\operatorname{arccot}\left(b(x)\right)\right]$	
10.	c is a constant $\frac{d}{dx}\left[c\right]$	
11.	$\frac{d}{dx}\left[\left\|s(x)\right\|\right]$	
12.	$\frac{d}{dx}\left[\cos\left(n(x)\right)\right]$	
13.	$\frac{d}{dx}\left[\operatorname{arccsc}\left(h(x)\right)\right]$	

14.	$\frac{d}{dx}[x]$	
15.	$\frac{d}{dx}\left[\tan\left(m(x)\right)\right]$	
16.	$\frac{d}{dx}\left[\sec\left(q(x)\right)\right]$	
17.	$\frac{d}{dx}\left[a^{f(x)}\right]$	
18.	$\frac{d}{dx}\left[\ln\left(g(x)\right)\right]$	
19.	$\frac{d}{dx}\left[\arccos\left(p(x)\right)\right]$	
20.	$\frac{d}{dx}\left[e^{h(x)}\right]$	
21.	$\frac{d}{dx}\left[\csc\left(v(x)\right)\right]$	
22.	$\left(f^{-1}\right)'(d)$	
23.	$\frac{d}{dx}\left[\arcsin\left(h(x)\right)\right]$	
24.	$\frac{d}{dx}\left[\log_a\left(b(x)\right)\right]$	
25.	$\frac{d}{dx}\left[\operatorname{arcsec}\left(d(x)\right)\right]$	
26.	$\frac{d}{dx}\left[\arctan\left(r(x)\right)\right]$	