

Differentiation Rules Benchmark # 9

1.	$\frac{d}{dx}[\sin(\tan(x))]$	
2.	$\frac{d}{dx}\left[\frac{n(x)}{p(x)}\right]$	
3.	$\frac{d}{dx}[\ln(x^3)]$	
4.	$\frac{d}{dx}[\operatorname{arccot}(e^x)]$	
5.	$m(x) = 2^{-x+1}$ $(m^{-1})'(2)$	SETUP ONLY!! You don't need to solve for the value.
6.	$\frac{d}{dx}[10^3]$	
7.	$\frac{d}{dx}[t(x) \cdot v(x)]$	
8.	$\frac{d}{dx}[\cos(2^x)]$	
9.	$\frac{d}{dx}[e^{2x^2+x+1}]$	
10.	c is a constant $\frac{d}{dx}[c \cdot p(x)]$	
11.	$\frac{d}{dx}[\sec(e^x)]$	
12.	$\frac{d}{dx}[(\sec(x))^2]$	

13.	$\frac{d}{dx}[\cot(x^2)]$	
14.	$\frac{d}{dx}[\operatorname{arccsc}(e^x)]$	
15.	$\frac{d}{dx}[x]$	
16.	$\frac{d}{dx}[\cos(x)]$	
17.	$\frac{d}{dx}[2^{-x^2}]$	
18.	$\frac{d}{dx}[\arctan(2^x)]$	
19.	$\frac{d}{dx}[\log_2(\cos(x) + 3x)]$	
20.	$\frac{d}{dx}[p(x) \pm q(x)]$	
21.	$\frac{d}{dx}[\arccos(-2x^{-1})]$	
22.	$\frac{d}{dx}[\arcsin(10x)]$	
23.	$\frac{d}{dx}[\tan(-x)]$	
24.	$\frac{d}{dx}[\operatorname{arcsec}(\cos(x))]$	
25.	$\frac{d}{dx}[\csc(2x^2 + x)]$	
26.	$\frac{d}{dx}[g(h(x))]$	