

## Differentiation Rules Benchmark #7

1.	$\frac{d}{dx}[x^2 - x^{-1} + 1]$	
2.	$\frac{d}{dx}\left[\frac{b(x)}{g(x)}\right]$	
3.	$\frac{d}{dx}[\ln(\ln(x))]$	
4.	$\frac{d}{dx}[\operatorname{arccot}(5^x)]$	
5.	$\frac{d}{dx}[\pi^2]$	
6.	$\frac{d}{dx}[p(x) \cdot q(x)]$	
7.	$\frac{d}{dx}[\cos(\sin(x))]$	
8.	$\frac{d}{dx}[e^{(2^x)}]$	
9.	$c$ is a constant $\frac{d}{dx}[c \cdot w(x)]$	
10.	$\frac{d}{dx}[\sec(7^x)]$	
11.	$\frac{d}{dx}[\sec(\tan(x))]$	
12.	$\frac{d}{dx}[\tan^3(x)]$	
13.	$\frac{d}{dx}[\cot(-x^{-1})]$	

14.	$\frac{d}{dx}[\operatorname{arccsc}(2x)]$	
15.	$\frac{d}{dx}[x]$	
16.	$\frac{d}{dx}[ 2x+1 ]$	
17.	$\frac{d}{dx}[5^{\csc(x)}]$	
18.	$\frac{d}{dx}[\arctan(x^2)]$	
19.	$\frac{d}{dx}[\log_3(x^2+1)]$	
20.	$\frac{d}{dx}[q(x) \pm m(x)]$	
21.	$\frac{d}{dx}[\arccos(5^x)]$	
22.	$\frac{d}{dx}[\arcsin(2x+1)]$	
23.	$\frac{d}{dx}[\tan(e^x)]$	
24.	$\frac{d}{dx}[\operatorname{arcsec}(x^{-1})]$	
25.	$\frac{d}{dx}[\csc(3x^5)]$	
26.	$(h^{-1})'(c)$	