

DERIVATIVE RULES

1. $f(x) = k$; (k is a constant) $f'(x) =$
2. $f(x) = x^n$ $f'(x) =$
3. $f(x) = k(g(x))$ $f'(x) =$
4. $f(x) = g(x) + h(x)$ $f'(x) =$
5. $f(x) = g(x) - h(x)$ $f'(x) =$
6. $f(x) = g(x) * h(x)$ $f'(x) =$
7. $f(x) = x^{-n}$ $f'(x) =$
8. $f(x) = g(h(x))$ $f'(x) =$
9. $f(x) = g(x)^n$ $f'(x) =$
10. $f(x) = x^{m/n}$ $f'(x) =$
11. $f(x) = (g(x))^{m/n}$ $f'(x) =$
12. $f(x) = \ln x$ $f'(x) =$
13. $f(x) = \ln (g(x))$ $f'(x) =$
14. $f(x) = \ln^n g(x)$ or $(\ln g(x))^n$ $f'(x) =$
15. $f(x) = e^x$ $f'(x) =$
16. $f(x) = e^{g(x)}$ $f'(x) =$
17. $f(x) = a^x$; (a is a constant) $f'(x) =$
18. $f(x) = a^{g(x)}$ $f'(x) =$
19. $f(x) = \log_a x$ $f'(x) =$
20. $f(x) = \log_a g(x)$ $f'(x) =$
21. $f(x) = \sin x$ $f'(x) =$
22. $f(x) = \sin (g(x))$ $f'(x) =$
23. $f(x) = \sin^n x$ or $(\sin x)^n$ $f'(x) =$
24. $f(x) = \sin^n(g(x))$ $f'(x) =$
25. $f(x) = \cos x$ $f'(x) =$
26. $f(x) = \cos (g(x))$ $f'(x) =$