Basic Differentiation

1. $f(x) = 6$
2. $f(x) = -7$
3. $f(x) = x$
4. $f(x) = x^3$
5. $f(x) = x^9$
6. $f(x) = x^{-3}$
7. $f(x) = x^{-8}$
8. $f(x) = x^{\frac{3}{5}}$
9. $f(x) = x^{-\frac{7}{3}}$
10. $f(x) = \dfrac{1}{x^5}$
11. $f(x) = 5x^4$
12. $f(x) = 7x^{-5}$
13. $f(x) = \dfrac{6}{x^7}$
14. $f(x) = 4^x$
15. $f(x) = 7^{5x}$
16. $f(x) = 9^{-7x}$
17. $f(x) = 11^{\frac{x}{5}}$
18. $f(x) = e^{3c}$
19. $f(x) = e^{-7x}$
20. $f(x) = e^{-5x}$
21. $f(x) = e^{3x^2}$
22. $f(x) = e^{x^4}$
23. $f(x) = 11^{3x^3}$
24. $f(x) = \ln(2x)$
25. $f(x) = \ln(4x)$
26. $f(x) = \ln(x^3)$
27. $f(x) = \ln(-7x^5)$
28. $f(x) = \log_7 x$
29. $f(x) = \log_{11}(3x)$
30. $f(x) = \log_2(4x^5)$
31. $f(x) = x^3 + 5x^2 - 7x + 2$
32. $f(x) = 6x^{-7} + 7^{2x}$
33. $f(x) = \dfrac{3}{x^{13}} + 5x^3 - 5 + 3^{9x}$
34. $f(x) = \ln(5x^2) + \log_9(5x)$
35. $f(x) = \log_8(3x^3 - 6x + 1)$
36. $f(x) = 6^{(3x^2 - 7x + 1)}$
37. $f(x) = e^{\ln(5x-3)}$
38. $f(x) = \ln(5^{3x^3 + 7x - e^{2x}})$