

Differentiate each of the following by hand.

1. $f(x) = 2^{91}$

2. $f(x) = x^3 - 2x + \frac{6}{2}$

3. $f(t) = 1.4t^5 - 2.3t^3 - t$

4. $y = \sqrt{x}(x + 1)$

5. $f(x) = 2e^x + \frac{2}{\sqrt[3]{x}}$

6. $G(y) = xy^{-8}$

7. $s(r) = e^r + r^e$