

Ejercicios de derivadas (básico)

1. $f(x) = -2x^2 - 5$
2. $f(x) = \frac{1}{4}x^4 - \frac{6}{5}\sqrt[3]{x^5} + x^3 + 2$
3. $f(x) = \frac{x^3+1}{3}$
4. $f(x) = \frac{x+2}{x-1}$
5. $f(x) = x^3 \ln(x)$
6. $f(x) = x \ln(x^3 + 5)$
7. $f(x) = \frac{5}{x^5}$
8. $f(x) = \frac{1}{\sqrt{x}}$
9. $f(x) = \frac{1}{\sqrt{x^2-3x+5}}$
10. $f(x) = \sqrt[3]{x^2} + \sqrt{x}$
11. $f(x) = \ln(2x^3 - 6x^2 + 3)$
12. $f(x) = \ln(\sqrt{x^2 + 1})$
13. $f(x) = e^{1-x^2}$
14. $f(x) = 7^{\sqrt{x+1}}$
15. $f(x) = \ln\left(\frac{e^x+1}{e^x-1}\right)$

Soluciones

1. $f'(x) = -4x$ 2. $f'(x) = x^3 - 2x^{\frac{2}{3}} + 3x^2$ 3. $f'(x) = x^2$ 4. $f'(x) = \frac{-3}{(x-1)^2}$ 5. $f'(x) = 3x^2 \ln(x) + x^2$
6. $f'(x) = \ln(x^3 + 1) + \frac{3x^3}{x^3+5}$ 7. $f'(x) = \frac{-25}{x^6}$ 8. $f'(x) = \frac{-1}{2x^{\frac{3}{2}}}$ 9. $f'(x) = \frac{3-2x}{2(x^2-3x+5)^{3/2}}$ 10. $f'(x) = \frac{2}{3}x^{-\frac{1}{3}} + \frac{1}{2\sqrt{x}}$
11. $f'(x) = \frac{6x^2-12x}{2x^3-6x^2+3}$ 12. $f'(x) = \frac{x}{x^2+1}$ 13. $f'(x) = -2xe^{1-x^2}$ 14. $f'(x) = \frac{7\sqrt{x+1}}{2\sqrt{x+1}} \ln 7$ 15. $f'(x) = \frac{e^x}{e^x+1} + \frac{e^x}{e^x-1}$