

Esercizi per Casa - Metodi matematici per l'economia

Foglio 3 - II modulo

1. Calcolare le derivate delle seguenti funzioni

$$f(x) = 5x$$

$$f(x) = 3x^4 + 2$$

$$f(x) = \frac{x^2+x}{(x-1)^2}$$

$$f(x) = \sqrt{x}$$

$$f(x) = \frac{\sqrt{x}+1}{\log x}$$

$$f(x) = (x^2 + 1)^4 + (x - 1)^3 \cdot \log x$$

$$f(x) = 3^{2x^2}$$

$$f(x) = \sqrt[4]{x^3}$$

$$f(x) = \sqrt{\log x}$$

$$f(x) = x^3 \cdot (x - 2)^5 \cdot (7x + 1)$$

$$f(x) = \frac{x^3 \cdot (x+1)^2}{x-1}$$

$$f(x) = \frac{x^2 - 2x + 3}{x-5}$$

$$f(x) = \frac{1}{\sqrt{2x-1}}$$

$$f(x) = \log(2x + 1)$$

$$f(x) = 7x^2$$

$$f(x) = 3x^2 + 7x - 1$$

$$f(x) = \frac{\log x}{3x^2+4x}$$

$$f(x) = \log_2 x$$

$$f(x) = 4 \log x + 3x^3$$

$$f(x) = x^x$$

$$f(x) = 2x^4 \cdot \log x$$

$$f(x) = x \cdot e^{\frac{x}{1-x}}$$

$$f(x) = \log 3x$$

$$f(x) = e^{\sqrt[4]{x^3}}$$

$$f(x) = \frac{x-1}{x^2+1} + 2x^3$$

$$f(x) = \frac{3x}{x^2-1}$$

$$f(x) = \frac{3x(x+1)}{x^2-1}$$

$$f(x) = e^{\frac{2x+1}{x}}$$