Φύλλο Εργασίας

Μάθημα: Κανόνες Παραγώγισης

Δραστηριότητα με προχωρημένες ασκήσεις

Να βρεθεί η παράγωγος των συναρτήσεων:

- $f(x) = ax^3 + \beta x^2 + \gamma x + \delta$
- $f(x) = 2\sqrt{x} - \sqrt[3]{x}$
- $f(x) = 3 - 2\eta\mu x + \sigma\upsilon\nu x$
- $f(x) = x - \ln x$
- $f(x) = \frac{1}{2}x^2 \ln x$
- $f(x) = \frac{e^x}{x+1}$
- $f(x) = \frac{x^2 - 1}{x+1}$
- $f(x) = \frac{x^2(x+1)}{x^2+1}$
- $f(x) = \frac{2}{x} - \frac{1}{\sqrt{x}} + \frac{3}{x^2}$
- $f(x) = 3\eta\mu x\sigma\upsilon\nu x - 4x^2$
- $f(x) = x^3 \ln x$
- $f(x) = \frac{x^2}{e^x}$
- $f(x) = \frac{x^2 - x + 1}{x^2 + x + 1}$
- $f(x) = \frac{\eta\mu x}{1 - \sigma\upsilon\nu x}$
- $f(x) = (x^2 - x + 1)^3$
- $f(x) = \frac{1}{3}\eta\mu^3 x - \frac{1}{2}\sigma\upsilon\nu^2 x$
- $f(x) = \sqrt[3]{2x+1}$
- $f(x) = \eta\mu(\alpha x + \beta) - \sigma\upsilon\nu(\alpha x + \beta)$
- $f(x) = \frac{1}{2}(e^x - e^{-x})$
- $f(x) = \sqrt{\varepsilon\phi 2x}$
- $f(x) = \ln(\ln x)$
- $f(x) = \eta\mu(\sigma\upsilon\nu 2x)$
- $f(x) = x^2\sigma\upsilon\nu\frac{1}{x}$
- $f(x) = x \cdot e^{-\frac{1}{x}}$
- $f(x) = \ln\left(\frac{e^x - 1}{x}\right)$
- $f(x) = a^x$
- $g(x) = 3^{x^2}$
- $h(x) = x^x$