

Γ ΛΥΚΕΙΟΥ ΜΕΡΟΣ Α

15.14 1)

$$\alpha) [\eta\mu(2\ln x - x)]' = \sigma\upsilon\nu(2\ln x - x) \cdot (2\ln x - x)' = \sigma\upsilon\nu(2\ln x - x) \cdot \left(\frac{2}{x} - 1\right)$$

$$\beta) [\eta\mu(1 + \sigma\upsilon\nu x)]' = \sigma\upsilon\nu(1 + \sigma\upsilon\nu x) \cdot (1 + \sigma\upsilon\nu x)' = \sigma\upsilon\nu(1 + \sigma\upsilon\nu x) \cdot (-\eta\mu x)$$

15.14 2)

$$\sigma\upsilon\nu(x^2 - 7x) \cdot (x^2 - 7x)' = (2x - 7)\sigma\upsilon\nu(x^2 - 7x)$$

15.14 3)

$$\sigma\upsilon\nu(x^4 - x^3) \cdot (x^4 - x^3)' = (4x^3 - 3x^2)\sigma\upsilon\nu(x^4 - x^3)$$

15.14 4)

$$\sigma\upsilon\nu(\sigma\upsilon\nu x) \cdot (\sigma\upsilon\nu x)' = \sigma\upsilon\nu(\sigma\upsilon\nu x) \cdot (-\eta\mu x) = -\sigma\upsilon\nu(\sigma\upsilon\nu x) \cdot \eta\mu x$$

15.14 5)

$$\sigma\upsilon\nu(\eta\mu x) \cdot (\eta\mu x)' = \sigma\upsilon\nu(\eta\mu x) \cdot \sigma\upsilon\nu x$$

15.14 6)

$$\sigma\upsilon\nu(\varepsilon\varphi x) \cdot (\varepsilon\varphi x)' = \frac{\sigma\upsilon\nu(\varepsilon\varphi x)}{\sigma\upsilon\nu^2 x}$$

15.14 7)

$$\sigma\upsilon\nu(\sigma\varphi x) \cdot (\sigma\varphi x)' = -\frac{\sigma\upsilon\nu(\sigma\varphi x)}{\eta\mu^2 x}$$

15.14 8)

$$\sigma\upsilon\nu(e^x) \cdot (e^x)' = e^x \cdot \sigma\upsilon\nu(e^x)$$

15.14 9)

$$\sigma\upsilon\nu(\ln x) \cdot (\ln x)' = \frac{\sigma\upsilon\nu(\ln x)}{x}$$

15.14 10)

$$\sigma\upsilon\nu\left(\frac{1}{x}\right) \cdot \left(\frac{1}{x}\right)' = -\frac{\sigma\upsilon\nu\left(\frac{1}{x}\right)}{x^2}$$

15.14 11)

$$\sigma\upsilon\nu(4^x) \cdot (4^x)' = 4^x \ln 4 \cdot \sigma\upsilon\nu(4^x)$$

15.14 12)

$$\sigma\upsilon\nu(\sqrt{x}) \cdot (\sqrt{x})' = \frac{\sigma\upsilon\nu(\sqrt{x})}{2\sqrt{x}}$$