

Γ ΛΥΚΕΙΟΥ ΜΕΡΟΣ Α

15.17 1)

$$a) \left[\sigma\varphi(x^2 + x + 1) \right]' = -\frac{1}{\eta\mu^2(x^2 + x + 1)}(x^2 + x + 1)' = -\frac{2x + 1}{\eta\mu^2(x^2 + x + 1)}$$

$$b) \left[\sigma\varphi(x - \sigma v v x) \right]' = -\frac{1}{\eta\mu^2(x - \sigma v v x)}(x - \sigma v v x)' = -\frac{1 + \eta\mu x}{\eta\mu^2(x - \sigma v v x)}$$

15.17 2)

$$-\frac{1}{\eta\mu^2(6x^2 - x)} \cdot (6x^2 - x)' = -\frac{12x - 1}{\eta\mu^2(6x^2 - x)}$$

15.17 3)

$$-\frac{1}{\eta\mu^2(3x^3 - x^2)} \cdot (3x^3 - x^2)' = -\frac{9x^2 - 2x}{\eta\mu^2(3x^3 - x^2)}$$

15.17 4)

$$-\frac{1}{\eta\mu^2(\sigma v v x)} \cdot (\sigma v v x)' = \frac{\eta\mu x}{\eta\mu^2(\sigma v v x)}$$

15.17 5)

$$-\frac{1}{\eta\mu^2(\eta\mu x)} \cdot (\eta\mu x)' = -\frac{\sigma v v x}{\eta\mu^2(\eta\mu x)}$$

15.17 6)

$$-\frac{1}{\eta\mu^2(\varepsilon\varphi x)} \cdot (\varepsilon\varphi x)' = -\frac{1}{\eta\mu^2(\varepsilon\varphi x) \cdot \sigma v v^2 x}$$

15.17 7)

$$-\frac{1}{\eta\mu^2(\sigma\varphi x)} \cdot (\sigma\varphi x)' = \frac{1}{\eta\mu^2(\sigma\varphi x) \cdot \eta\mu^2 x}$$

15.17 8)

$$-\frac{1}{\eta\mu^2\left(\frac{1}{x}\right)} \cdot \left(\frac{1}{x}\right)' = \frac{1}{x^2\eta\mu^2\left(\frac{1}{x}\right)}$$

15.17 9)

$$-\frac{1}{\eta\mu^2(e^x)} \cdot (e^x)' = \frac{e^x}{\eta\mu^2(e^x)}$$

15.17 10)

$$-\frac{1}{\eta\mu^2(\ln x)} \cdot (\ln x)' = -\frac{1}{x\eta\mu^2(\ln x)}$$

15.17 11)

$$-\frac{1}{\eta\mu^2(8^x)} \cdot (8^x)' = -\frac{8^x \ln 8}{\eta\mu^2(8^x)}$$

$$-\frac{1}{\eta \mu^2(\sqrt{x})} \cdot (\sqrt{x})' = -\frac{1}{2\sqrt{x} \cdot \eta \mu^2(\sqrt{x})}$$