

Γ ΛΥΚΕΙΟΥ ΜΕΡΟΣ Α

15.15 1)

$$\alpha) \left[\sin(x^4 - 2x^2) \right]' = -\eta\mu(x^4 - 2x^2) \cdot (x^4 - 2x^2)' = -\eta\mu(x^4 - 2x^2) \cdot (4x^3 - 4x)$$

$$\beta) \left[\sin(x + e^x) \right]' = -\eta\mu(x + e^x) \cdot (x + e^x)' = -\eta\mu(x + e^x) \cdot (1 + e^x)$$

15.15 2)

$$-\eta\mu(x^3 - x) \cdot (x^3 - x)' = -(3x^2 - 1)\eta\mu(x^3 - x)$$

15.15 3)

$$-\eta\mu(x^5 + 2x^2) \cdot (x^5 + 2x^2)' = -(5x^4 + 4x)\eta\mu(x^5 + 2x^2)$$

15.15 4)

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

15.15 5)

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

15.15 6)

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

15.15 7)

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

15.15 8)

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

15.15 9)

$$-\eta\mu e^x \cdot (e^x)' = -e^x \eta\mu e^x$$

15.15 10)

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

15.15 11)

$$-\eta\mu(9^x) \cdot (9^x)' = -9^x \ln 9 \cdot \eta\mu(9^x)$$

15.15 12)

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