

Γ ΛΥΚΕΙΟΥ ΜΕΡΟΣ Α

15.13 1)

$$\alpha) \left(\sqrt{x^3 - 4x^2} \right)' = \frac{1}{2\sqrt{x^3 - 4x^2}} (x^3 - 4x^2)' = \frac{3x^2 - 8x}{2\sqrt{x^3 - 4x^2}}$$
$$\beta) \left(\sqrt{e^x - \eta\mu x} \right)' = \frac{1}{2\sqrt{e^x - \eta\mu x}} (e^x - \eta\mu x)' = \frac{e^x - \sigma\upsilon\nu x}{2\sqrt{e^x - \eta\mu x}}$$

15.13 2)

$$\frac{1}{2\sqrt{x^2 + x}} \cdot (x^2 + x)' = \frac{2x + 1}{2\sqrt{x^2 + x}}$$

15.13 3)

$$\frac{1}{2\sqrt{2x^3 - 5x^2}} \cdot (2x^3 - 5x^2)' = \frac{6x^2 - 10x}{2\sqrt{2x^3 - 5x^2}}$$

15.13 4)

$$\frac{1}{2\sqrt{\eta\mu x}} \cdot (\eta\mu x)' = \frac{\sigma\upsilon\nu x}{2\sqrt{\eta\mu x}}$$

15.13 5)

$$\frac{1}{2\sqrt{\epsilon\phi x}} \cdot (\epsilon\phi x)' = \frac{1}{2\sigma\upsilon\nu^2 x \sqrt{\epsilon\phi x}}$$

15.13 6)

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

15.13 7)

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

15.13 8)

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

15.13 9)

$$\frac{1}{2\sqrt{e^x}} \cdot (e^x)' = \frac{e^x}{2\sqrt{e^x}}$$

15.13 10)

$$\frac{1}{2\sqrt{\ln x}} \cdot (\ln x)' = \frac{1}{2x\sqrt{\ln x}}$$

15.13 11)

$$\frac{1}{2\sqrt{3^x}} \cdot (3^x)' = \frac{3^x \ln 3}{2\sqrt{3^x}}$$