

ΛΥΣΗ

$$\alpha) \int_3^2 f(x)dx = -\int_2^3 f(x)dx = -2.$$

$$\beta) \int_3^7 f(x)dx = \int_3^1 f(x)dx + \int_1^7 f(x)dx = -\int_1^3 f(x)dx + \int_1^7 f(x)dx = -4 + 10 = 6.$$

$$\gamma) \int_7^2 f(x)dx = \int_7^3 f(x)dx + \int_3^2 f(x)dx = -\int_3^7 f(x)dx + \int_3^2 f(x)dx = -6 - 2 = -8.$$

$$\delta) \int_1^3 (f(x) - x)dx = \int_1^3 f(x)dx - \int_1^3 xdx = 4 - \left[\frac{x^2}{2} \right]_1^3 = 4 - \left(\frac{9}{2} - \frac{1}{2} \right) = 4 - 4 = 0.$$