

6.27

$$\lim_{x \rightarrow x_0} \left[2f(x) + 1 \right] \eta \mu \frac{1}{f(x)} \overset{\substack{\text{θέτουμε } y = \frac{1}{f(x)} \\ \text{όταν } x \rightarrow x_0 \text{ τότε } y \rightarrow 0}}{=} \lim_{y \rightarrow 0} \left[2 \frac{1}{y} + 1 \right] \eta \mu y = \lim_{y \rightarrow 0} \frac{y+2}{y} \eta \mu y =$$

$$= \lim_{y \rightarrow 0} (y+2) \cdot \lim_{y \rightarrow 0} \frac{\eta \mu y}{y} = 2 \cdot 1 = \boxed{2}$$