

$$\begin{aligned}
 \alpha' \text{ μέλος} &= \frac{\varepsilon\varphi^2\alpha - 1}{\varepsilon\varphi^2\alpha + 1} = \frac{\frac{\eta\mu^2\alpha}{\sigma\upsilon\nu^2\alpha} - 1}{\frac{\eta\mu^2\alpha}{\sigma\upsilon\nu^2\alpha} + 1} = \frac{\frac{\eta\mu^2\alpha - \sigma\upsilon\nu^2\alpha}{\sigma\upsilon\nu^2\alpha}}{\frac{\eta\mu^2\alpha + \sigma\upsilon\nu^2\alpha}{\sigma\upsilon\nu^2\alpha}} = \\
 &= \eta\mu^2\alpha - \sigma\upsilon\nu^2\alpha = (1 - \sigma\upsilon\nu^2\alpha) - \sigma\upsilon\nu^2\alpha = 1 - 2\sigma\upsilon\nu^2\alpha = \\
 &= \beta' \text{ μέλος}
 \end{aligned}$$