

Β ΛΥΚΕΙΟΥ ΑΛΓΕΒΡΑ

13.2 1)

$$\alpha) \quad \alpha' \text{ μέλος} = \frac{\text{συν}\omega}{\text{σφ}\omega} = \frac{\text{σφ}\omega = \frac{\text{συν}\omega}{\eta\mu\omega}}{\eta\mu\omega} = \frac{\text{συν}\omega}{\frac{\text{συν}\omega}{\eta\mu\omega}} = \frac{\cancel{\text{συν}\omega} \cdot \eta\mu\omega}{\cancel{\text{συν}\omega}} = \eta\mu\omega = \beta' \text{ μέλος}$$

$$\beta) \quad \alpha' \text{ μέλος} = \varepsilon\varphi^2\omega \cdot \text{συν}^2\omega = \frac{\varepsilon\varphi^2\omega = \frac{\eta\mu^2\omega}{\text{συν}^2\omega}}{\text{συν}^2\omega} \cdot \cancel{\text{συν}^2\omega} = \eta\mu^2\omega \stackrel{\eta\mu^2\omega = 1 - \text{συν}^2\omega}{=} 1 - \text{συν}^2\omega = \beta' \text{ μέλος}$$

13.2 2)

$$\alpha' \text{ μέλος} = \varepsilon\varphi\omega \cdot \text{συν}\omega = \frac{\eta\mu\omega}{\text{συν}\omega} \cdot \text{συν}\omega = \eta\mu\omega = \beta' \text{ μέλος}$$

13.2 3)

$$\alpha' \text{ μέλος} = \text{σφ}\omega \cdot \eta\mu\omega = \frac{\text{συν}\omega}{\eta\mu\omega} \cdot \eta\mu\omega = \text{συν}\omega = \beta' \text{ μέλος}$$

13.2 4)

$$\alpha' \text{ μέλος} = \frac{\varepsilon\varphi\omega}{\eta\mu\omega} = \frac{\frac{\eta\mu\omega}{\text{συν}\omega}}{\eta\mu\omega} = \frac{1}{\text{συν}\omega} = \beta' \text{ μέλος}$$

13.2 5)

$$\alpha' \text{ μέλος} = \frac{\eta\mu\omega}{\varepsilon\varphi\omega} = \frac{\eta\mu\omega}{\frac{\eta\mu\omega}{\text{συν}\omega}} = \text{συν}\omega = \beta' \text{ μέλος}$$

13.2 6)

$$\alpha' \text{ μέλος} = \frac{\text{σφ}\omega}{\text{συν}\omega} = \frac{\text{συν}\omega}{\frac{\eta\mu\omega}{\text{συν}\omega}} = \frac{1}{\eta\mu\omega} = \beta' \text{ μέλος}$$

13.2 7)

$$\alpha' \text{ μέλος} = \text{συν}^2\omega \cdot \varepsilon\varphi^2\omega + \text{συν}^2\omega = \text{συν}^2\omega \cdot \frac{\eta\mu^2\omega}{\text{συν}^2\omega} + \text{συν}^2\omega = \eta\mu^2\omega + \text{συν}^2\omega = 1 = \beta' \text{ μέλος}$$

13.2 8)

$$\alpha' \text{ μέλος} = \eta\mu^2\omega \cdot \text{σφ}^2\omega + \eta\mu^2\omega = \eta\mu^2\omega \cdot \frac{\text{συν}^2\omega}{\eta\mu^2\omega} + \eta\mu^2\omega = \text{συν}^2\omega + \eta\mu^2\omega = 1 = \beta' \text{ μέλος}$$

13.2 9)

$$\alpha' \text{ μέλος} = \eta\mu\omega \cdot \text{συν}\omega \cdot \varepsilon\varphi\omega = \eta\mu\omega \cdot \text{συν}\omega \cdot \frac{\eta\mu\omega}{\text{συν}\omega} = \eta\mu^2\omega = 1 - \text{συν}^2\omega = \beta' \text{ μέλος}$$

13.2 10)

$$\alpha' \text{ μέλος} = \eta\mu\omega \cdot \text{συν}\omega \cdot \text{σφ}\omega = \eta\mu\omega \cdot \text{συν}\omega \cdot \frac{\text{συν}\omega}{\eta\mu\omega} = \text{συν}^2\omega = 1 - \eta\mu^2\omega = \beta' \text{ μέλος}$$

13.2 11)

$$\alpha' \text{ μέλος} = \text{σφ}^2\omega \cdot \eta\mu^2\omega = \frac{\text{συν}^2\omega}{\eta\mu^2\omega} \cdot \eta\mu^2\omega = \text{συν}^2\omega = 1 - \eta\mu^2\omega = \beta' \text{ μέλος}$$

13.2 12)

$$\alpha' \text{ μέλος} = \eta\mu\omega \cdot \text{συν}\omega (\varepsilon\varphi\omega + \text{σφ}\omega) = \eta\mu\omega \cdot \text{συν}\omega \left(\frac{\eta\mu\omega}{\text{συν}\omega} + \frac{\text{συν}\omega}{\eta\mu\omega} \right) = \eta\mu^2\omega + \text{συν}^2\omega = 1 = \beta' \text{ μέλος}$$