

Β ΛΥΚΕΙΟΥ ΑΛΓΕΒΡΑ

14.5 1)

$$\alpha) \quad \eta\mu 120^\circ = \eta\mu(180^\circ - 60^\circ) \stackrel{\eta\mu(\pi-\omega)=\eta\mu\omega}{=} \eta\mu 60^\circ = \frac{\sqrt{3}}{2}$$

$$\beta) \quad \sigma\upsilon\nu 225^\circ = \sigma\upsilon\nu(180^\circ + 45^\circ) \stackrel{\sigma\upsilon\nu(\pi+\omega)=-\sigma\upsilon\nu\omega}{=} -\sigma\upsilon\nu 45^\circ = -\frac{\sqrt{2}}{2}$$

$$\gamma) \quad \varepsilon\varphi(-60^\circ) \stackrel{\varepsilon\varphi(-\omega)=-\varepsilon\varphi\omega}{=} -\varepsilon\varphi 60^\circ = -\sqrt{3}$$

$$\delta) \quad \sigma\varphi 240^\circ = \sigma\varphi(270^\circ - 30^\circ) \stackrel{\sigma\varphi(\frac{3\pi}{2}-\omega)=-\varepsilon\varphi\omega}{=} \varepsilon\varphi 30^\circ = \frac{\sqrt{3}}{3}$$

14.5 2)

$$\eta\mu 150^\circ = \eta\mu(180^\circ - 30^\circ) = \eta\mu 30^\circ = \frac{1}{2}$$

14.5 3)

$$\sigma\upsilon\nu 330^\circ = \sigma\upsilon\nu(360^\circ - 30^\circ) = \sigma\upsilon\nu 30^\circ = \frac{\sqrt{3}}{2}$$

14.5 4)

$$\varepsilon\varphi 210^\circ = \varepsilon\varphi(270^\circ - 60^\circ) = \sigma\varphi 60^\circ = \frac{\sqrt{3}}{3}$$

14.5 5)

$$\sigma\varphi(-45^\circ) = \sigma\varphi(360^\circ - 45^\circ) = -\sigma\varphi 45^\circ = -1$$

14.5 6)

$$\varepsilon\varphi(240^\circ) = \varepsilon\varphi(180^\circ + 60^\circ) = \varepsilon\varphi 60^\circ = \sqrt{3}$$

14.5 7)

$$\sigma\upsilon\nu(135^\circ) = \sigma\upsilon\nu(180^\circ - 45^\circ) = -\sigma\upsilon\nu 45^\circ = -\frac{\sqrt{2}}{2}$$

14.5 8)

$$\sigma\varphi 300^\circ = \sigma\varphi(360^\circ - 60^\circ) = -\sigma\varphi 60^\circ = -\frac{\sqrt{3}}{3}$$

14.5 9)

$$\eta\mu 225^\circ = \eta\mu(180^\circ + 45^\circ) = -\eta\mu 45^\circ = -\frac{\sqrt{2}}{2}$$

14.5 10)

$$\sigma\varphi 210^\circ = \sigma\varphi(270^\circ - 60^\circ) = \varepsilon\varphi 60^\circ = \sqrt{3}$$

14.5 11)

$$\eta\mu(-60^\circ) = \eta\mu(360^\circ - 60^\circ) = -\eta\mu 60^\circ = -\frac{\sqrt{3}}{2}$$

14.5 12)

$$\varepsilon\varphi 315^\circ = \varepsilon\varphi(360^\circ - 45^\circ) = -\varepsilon\varphi 45^\circ = -1$$

$$\sin 120^\circ = \sin(180^\circ - 60^\circ) = -\sin 60^\circ = -\frac{1}{2}$$