

Mutassuk meg, hogy

$$\alpha\alpha_1 + \beta\beta_1 + \gamma\gamma_1 \leq 1,$$

ha

$$\alpha^2 + \beta^2 + \gamma^2 = 1 \quad \text{és} \quad \alpha_1^2 + \beta_1^2 + \gamma_1^2 = 1.$$