

$$17) \quad p = (3, -4, 12)$$

$$\cos \alpha_1 = \frac{P_1}{|P|}$$

$$p \cdot q = |p| \cdot |q| \cdot \cos \theta$$

$$|p| = \sqrt{3^2 + (-4)^2 + 12^2}$$

$$|p| = 13$$

$$\cos \alpha_1 = \frac{3}{13} = 76,66^\circ$$

$$\cos \alpha_2 = \frac{-4}{13} = 107,92^\circ$$

$$\cos \alpha_3 = \frac{12}{13} = 22,62^\circ$$