

1.2.17

$$\cos \Theta_1 = \frac{P_1}{|P|} \text{ From Box}$$

$$P = (3, -4, 12)$$

$$|P| = \sqrt{9 + 16 + 144} = \sqrt{169} = 13$$

$$\cos \Theta_1 = \frac{P_1}{|P|} = \frac{3}{13} = 76.7^\circ$$

$$\cos \Theta_2 = \frac{P_2}{|P|} = \frac{-4}{13} = 107.1^\circ$$

$$\cos \Theta_3 = \frac{P_3}{|P|} = \frac{12}{13} = 22.7^\circ$$