



$$R_x = \sum F_x = 20 \sin 30^\circ + 8 \sin 45^\circ = 15.66 \text{ kN}$$

$$R_y = \sum F_y = 20 \cos 30^\circ - 8 \cos 45^\circ - 4 = 7.66 \text{ kN}$$

$$R = \sqrt{R_x^2 + R_y^2} = \underline{17.43 \text{ kN}}$$

$$\theta_x = \tan^{-1} (R_y / R_x) = \underline{26.1^\circ}$$

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