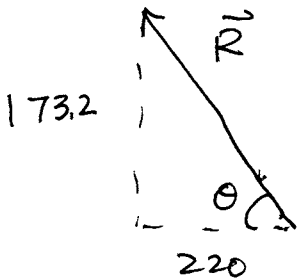


$$\begin{aligned}\Sigma F_x &= -120 - 200 \cos 60^\circ \\ &= -120 - 100 = -220 \text{ N}\end{aligned}$$

$$\begin{aligned}\Sigma F_y &= 0 + 200 \sin 60^\circ \\ &= 173.2 \text{ N}\end{aligned}$$

$$R = \sqrt{220^2 + 173.2^2} = 280 \text{ N}$$

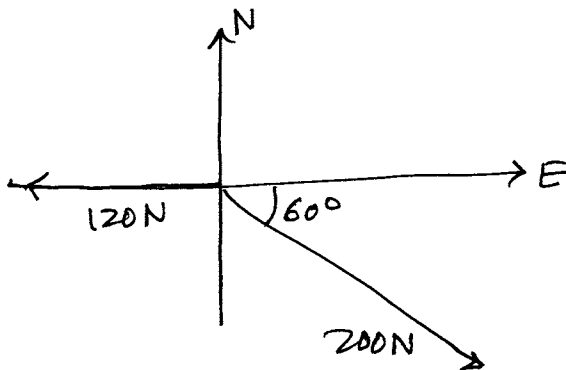


$$\tan \theta = \frac{173.2}{220}$$

$$\theta = 38.2^\circ$$

$$\boxed{\vec{R} = 280 \text{ N } \nearrow 38.2^\circ \text{ N of W}}$$

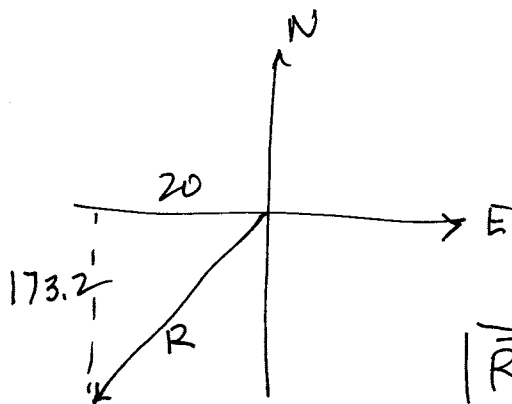
3.32



$$\begin{aligned}\Sigma F_x &= -120 + 200 \cos 60^\circ \\ &= -120 + 100 = -20 \text{ N}\end{aligned}$$

$$\begin{aligned}\Sigma F_y &= 0 - 200 \sin 60^\circ \\ &= -173.2\end{aligned}$$

$$R = \sqrt{20^2 + 173.2^2} = 174.4 \text{ N}$$



$$\tan \theta = \frac{173.2}{20}$$

$$\theta = 83.4^\circ$$

$$\boxed{\vec{R} = 174.4 \text{ N } \searrow 83.4^\circ \text{ S of W}}$$