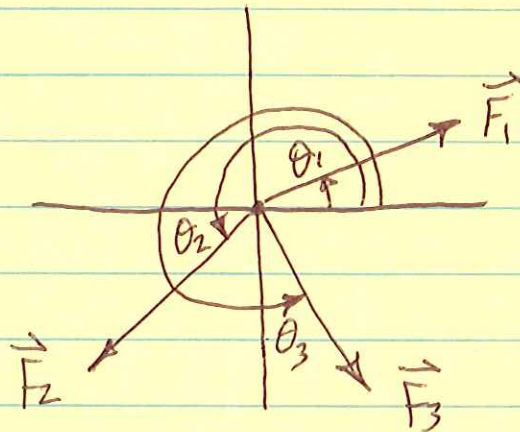


PROB. 2.22



$$\theta_1 = 25^\circ$$

$$\theta_2 = 270 - 50 = 220^\circ$$

$$\theta_3 = 360 - 60 = 300^\circ$$

$$\vec{F}_1 = (60 \cos 25^\circ) \hat{i} + (60 \sin 25^\circ) \hat{j}$$

$$\vec{F}_1 = (54.38) \hat{i} + (25.36) \hat{j} \text{ LB}$$

$$\vec{F}_2 = (50 \cos 220^\circ) \hat{i} + (50 \sin 220^\circ) \hat{j}$$

$$\vec{F}_2 = (-38.30) \hat{i} + (-32.14) \hat{j} \text{ N}$$

$$\vec{F}_3 = (40 \cos 300^\circ) \hat{i} + (40 \sin 300^\circ) \hat{j}$$

$$\vec{F}_3 = (20) \hat{i} + (-34.64) \hat{j} \text{ N}$$