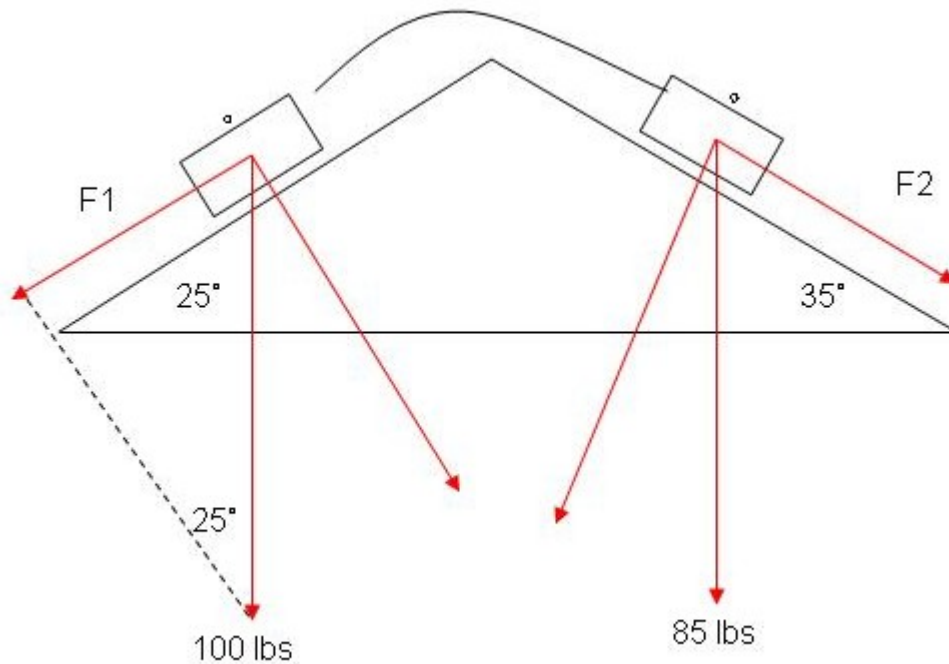


Ch 8.3 Number 33



Like figure 10 on page 600, the figure above shows the blocks broken into the respective forces. We are solving for the forces parallel to the ramp. The side with the most downward force (parallel to the ramp) will be the direction of travel.

$$\begin{aligned} F_1 &= 110 \sin 25^\circ \\ &= 46.49 \text{ lbs} \end{aligned}$$

$$\begin{aligned} F_2 &= 85 \sin 35^\circ \\ &= 48.75 \text{ lbs} \end{aligned}$$

Since F_1 is less than F_2 , they will slide to the right.