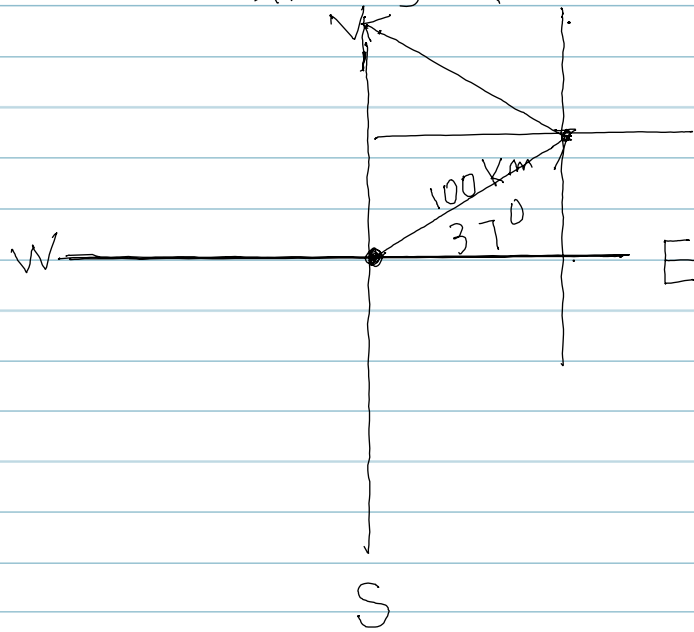


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某人首先往東偏北 37° 的方向，走了 100 公里，接著往西偏北 37° 的方向又走了 100 公里。此時他離出發地的直線距離為幾公里？方向為何？



$$\vec{R} = \vec{R}_1 + \vec{R}_2$$

$$= (100 \times \cos 37^\circ \vec{i} + 100 \times \sin 37^\circ \vec{j})$$

$$+ (-100 \times \cos 37^\circ \vec{i} + 100 \times \sin 37^\circ \vec{j})$$

$$= (80 (\text{km}) \vec{i} + 60 (\text{km}) \vec{j})$$

$$+ (-80 (\text{km}) \vec{i} + 60 (\text{km}) \vec{j})$$

$$= 120 (\text{km}) \vec{j}$$

$$0 = \vec{R} + \vec{R}'$$

$$\vec{R}' = -\vec{R} = -120 (\text{km}) \vec{j}$$