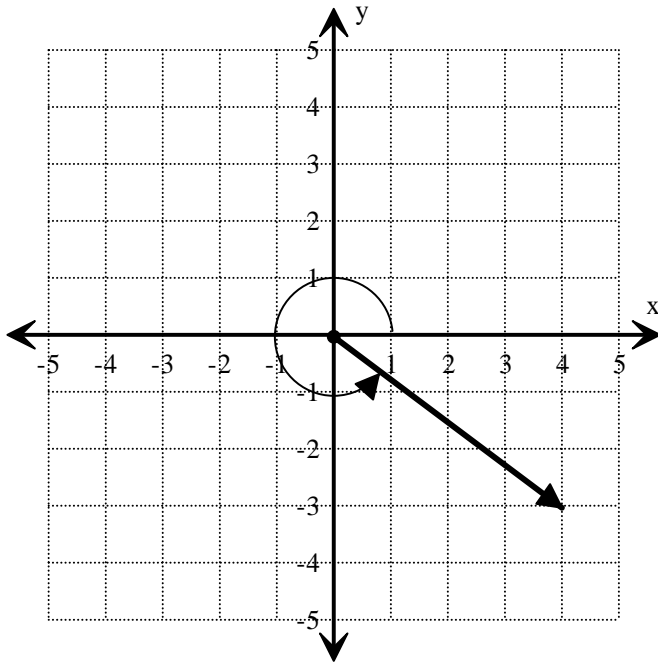1) You're given: $\vec{v}=<4,-3>$

2) Sketch a pic quickly to get a feeling for the angle.

3) Use the tangent function.

$$\tan(y)=\frac{-3}{4}$$

4) Apply the inverse tangent

$$y=\tan^{-1}\left(\frac{-3}{4}\right)$$

$$y\approx-36.87°$$

5) Add this angle to get $360°+(-36.87°)=323.13°$