

Problemas Sobre Vectores

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Resumen

Ah continuación daremos solución a el siguiente ejercicio.

$$f_x = 1 \cos 45^\circ$$

$$f_y = 1 \sin 45^\circ$$

$$F_x = 2 \cos 115^\circ$$

$$F_y = 2 \sin 115^\circ$$

$$F_1 = 1 \cos 45^\circ + 1 \sin 45^\circ = mg(\cos 45^\circ + \sin 45^\circ)$$

$$F_2 = 2 \cos 115^\circ + 2 \sin 115^\circ = 2mg (\cos 115^\circ + \sin 115^\circ)$$

$$|\vec{F}| = m\sqrt{(1 \cos 45 + 2 \cos 115)^2 + (1 \sin 45 + 2 \sin 115)^2} = 2.52$$

$$\theta \tan^{-1} \left(\frac{\sin 45 + 2 \sin 115}{\cos 45 + 2 \cos 115} \right) = -86.86$$

$$\theta = -86.86$$



Figura 1: This is a caption



Figura 2: This is a caption



Figura 3: This is a caption