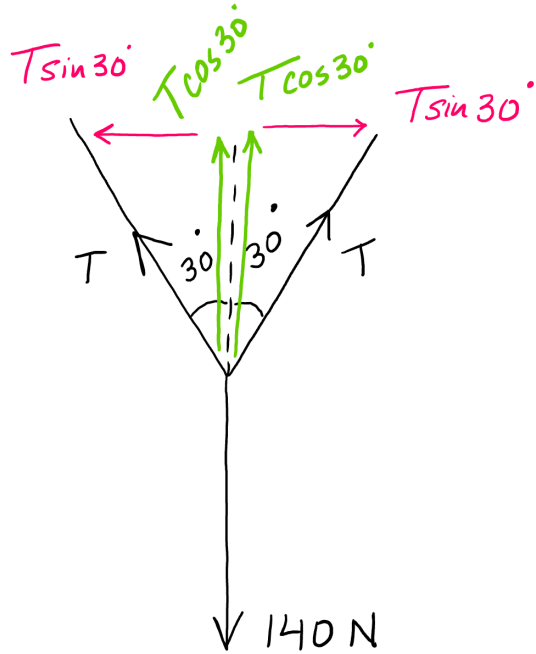


Example of vector Δ for EQ.

22 September 2020 18:38



(i) If that obj is in EQ.

Use Vector Resolution to find T.

Since Eq \therefore forces must balance in the horizontal & vertical plane hence

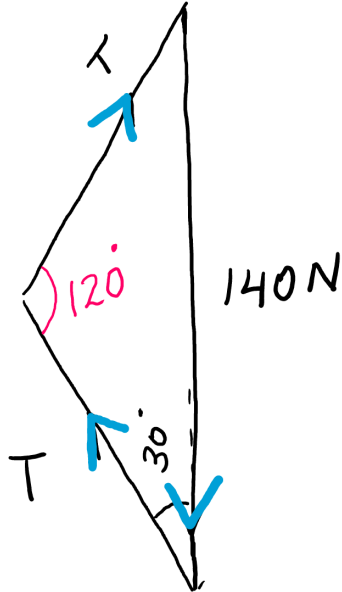
Vertical plane

$$T \cos 30^\circ + T \cos 30^\circ = 140$$

$$2T \cos 30^\circ = 140$$

$$T = 80.8 \text{ N}$$

(ii) Use Vector Δ for EQ to confirm the value of T.



Slide 1

Sine Rule

$$\frac{T}{\sin 30^\circ} = \frac{140}{\sin 120^\circ}$$

$$T = 80.8 \text{ N}$$

$$T \cos 30 + T \cos 30 = 140$$

$$2T \cos 30 = 140$$

$$T = 80.9$$