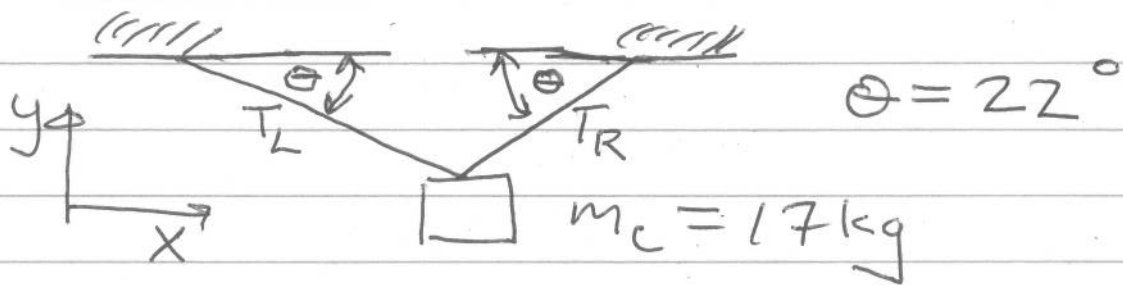


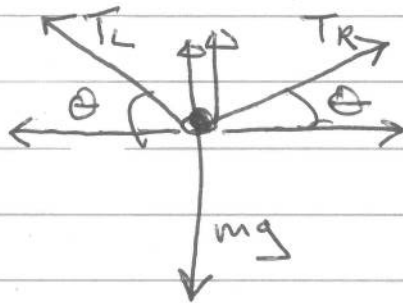
HANGING FOOD COOLER

COOLER IS SUPPORTED BY 2 CABLES. FIND TENSION IN EACH CABLE.



COOLER HAS ZERO ACCELERATION

X-DIR: $T_{Lx} + T_{Rx} = 0$



COMPONENTS OF TENSION & WEIGHT FORCE

$$-T_L \cos \theta + T_R \cos \theta = 0$$

$$\Rightarrow \boxed{T_L = T_R = T}$$

Y-DIR: $T_{Ly} + T_{Ry} + F_{gy} = 0$

$$T_L \sin \theta + T_R \sin \theta - mg = 0$$

$$2T \sin \theta = mg$$

$$T = \frac{mg}{2 \sin \theta} = 220 \text{ N}$$