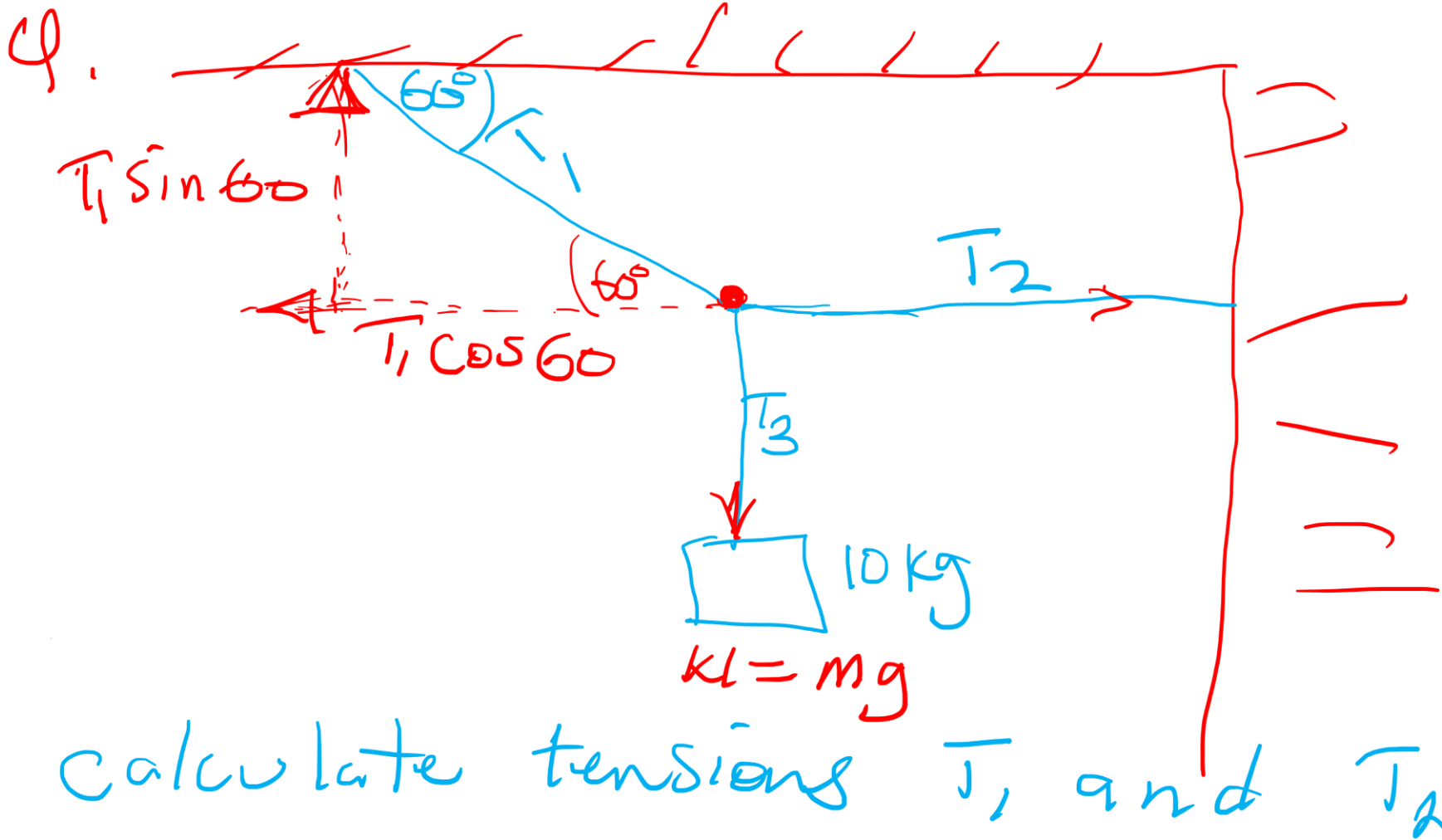






Horizontal Forces

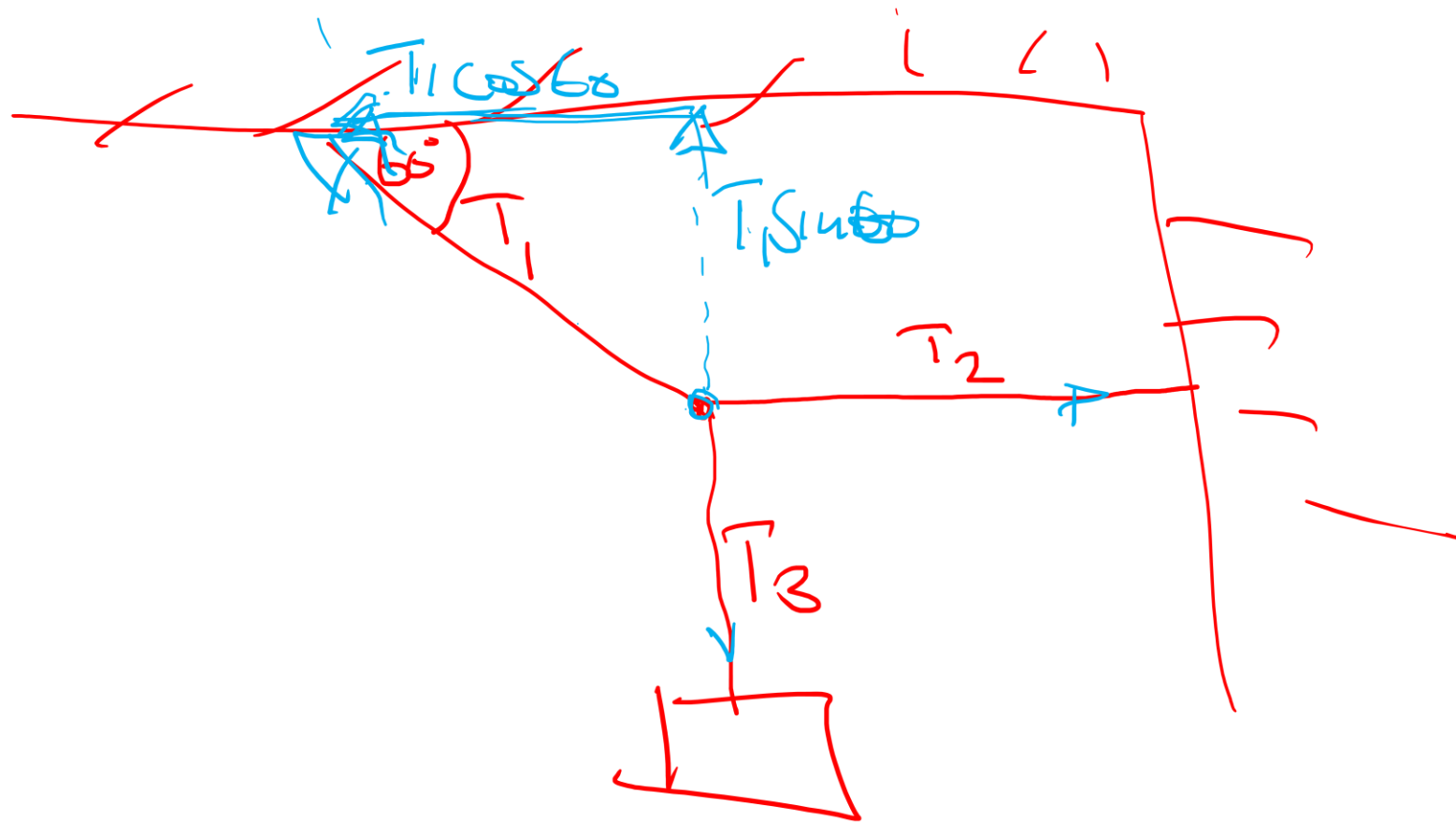
$$\sum F_x = 0$$

$$T_2 = T_1 \cos 60 \quad \text{--- ①}$$

Vertical Forces

$$T_3 = T_1 \sin 60$$

$$\sum F_y = 0$$



$$T_1 \cos 60 = T_2 \quad \text{--- ①}$$

$$T_1 \sin 60 = T_3 \quad \text{--- ②}$$

$$T_3 = x1 = mg = 10 \times 10 = 100 \times 1$$

$$T_1 \sin 60 = 100 \times 1$$

$$T_1 = \frac{100}{\sin 60} = \frac{100 \times 1}{0.866} = \underline{\underline{115.47 \text{ N}}}$$

✓

$$T_1 \cos 60 = T_2$$

$$115.47 \times \cos 60 = T_2$$

$$57.735 = T_2$$

$$T_2 = \underline{\underline{57.735}}$$

