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**Nombre del trabajo: problemario**

**Materia: física**

**Grado: cuarto Semestre.**

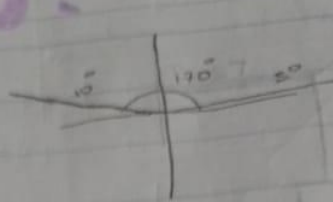
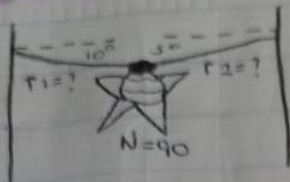
**Grupo: A.**

**PASIÓN POR EDUCAR**

Comitán de Domínguez Chiapas 03 de junio de 2023.

# PROBLEMARIO:

25-05-23.



$$T_{1x} = T_1 \cos 170^\circ$$

$$T_{1x} = -0.98 T_1$$

$$T_{1y} = T_1 \sin 170^\circ$$

$$T_{1y} = 0.17 T_1$$

$$T_{2x} = T_2 \cos 5^\circ$$

$$T_{2x} = 0.99 T_2$$

$$T_{2y} = T_2 \sin 5^\circ$$

$$T_{2y} = 0.08 T_2$$

$$\sum T_x = 0$$

$$T_{1x} + T_{2x} = 0$$

$$-0.98 T_1 + 0.99 T_2 = 0$$

$$\sum T_y = 0$$

$$T_{1y} + T_{2y} = 0$$

$$0.17 T_1 + 0.08 T_2 = 0$$

$$-0.98 T_1 + 0.99 T_2 = 0$$

$$-0.98 T_1 = -0.99 T_2$$

$$T_1 = 0.99 T_2$$

$$-0.98 T_1 = -0.99 T_2$$

$$T_1 = 10.10 T_2$$

$$0.17 T_1 + 0.08 T_2 = 0$$

$$0.17 T_1 (10.10 T_2) + 0.08 T_2 = 90$$

$$1.71 T_2 + 0.08 T_2 = 90 \text{ N}$$

$$1.79 T_2 = 90 \text{ N}$$

$$T_2 = \frac{90 \text{ N}}{1.79}$$

$$1.79 T_2$$

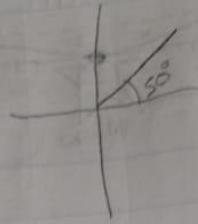
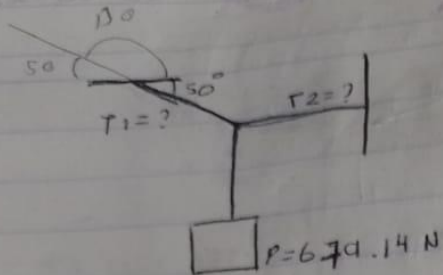
$$T_2 = 50.27 \text{ NW}$$

$$T_1 = 10.10 (50.27 \text{ NW})$$

$$T_1 = 507.72 \text{ NW}$$

25-05-23

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$$T_{1x} = T_1 \cos 130^\circ$$

$$T_{1x} = -0.64 T_1$$

$$T_{1y} = T_1 \sin 130^\circ$$

$$T_{1y} = 0.76 T_1$$

$$T_{2x} = T_2 \cos 0^\circ$$

$$T_{2x} = T_2$$

$$T_{2y} = T_2 \sin 0^\circ$$

$$T_{2y} = 0$$

$$\sum T_x = 0$$

$$T_{1x} + T_{2x} = 0$$

$$-0.64 T_1 + T_2 = 0$$

$$\sum T_y = 0$$

$$T_{1y} + T_{2y} = 0$$

$$0.76 T_1 + 0 T_2 = 0$$

$$-0.64 T_1 + T_2 = 0$$

$$-0.64 T_1 = -T_2$$

$$T_1 = T_2$$

$$-0.64 T_2$$

$$T_1 = 1.56 T_2$$

$$0.76 T_1 + 0 T_2 = 0$$

$$0.76 T_1 (1.56 T_2) + 0 T_2 = 679.14 \text{ N}$$

$$1.18 T_2 + 0 T_2 = 679.14 \text{ N}$$

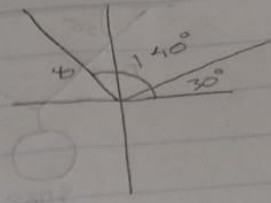
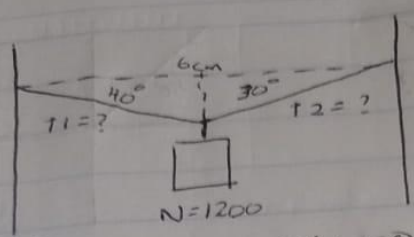
$$1.18 T_2 = 679.14 \text{ N}$$

$$1.18 T_2$$

$$T_2 = 575.54 \text{ N}$$

$$T_1 = 1.56 T_2 (575.54 \text{ N})$$

$$T_1 = 897.84 \text{ N}$$



$$T_{1x} = T_1 \cos 140^\circ$$

$$T_{1x} = -0.76 T_1$$

$$T_{1y} = T_1 \sin 140^\circ$$

$$T_{1y} = 0.64 T_1$$

$$T_{2x} = T_2 \cos 30^\circ$$

$$T_{2x} = 0.86 T_2$$

$$T_{2y} = T_2 \sin 30^\circ$$

$$T_{2y} = 0.5 T_2$$

$$\sum T_x = 0$$

$$T_{1x} + T_{2x} = 0$$

$$\boxed{-0.76 T_1 + 0.86 T_2 = 0}$$

$$\sum T_y = 0$$

$$T_{1y} + T_{2y} = 0$$

$$\boxed{0.64 T_1 + 0.5 T_2 = 0}$$

$$-0.76 T_1 + 0.86 T_2 = 0$$

$$-0.76 T_1 = -0.86 T_2$$

$$T_1 = \frac{0.86 T_2}{0.76}$$

$$T_1 = 1.13 T_2$$

$$0.64 T_1 + 0.5 T_2 = 0$$

$$0.64 T_1 (1.13 T_2) + 0.5 T_2 = 1200$$

$$0.72 T_2 + 0.5 T_2 = 1200 \text{ N}$$

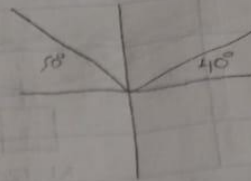
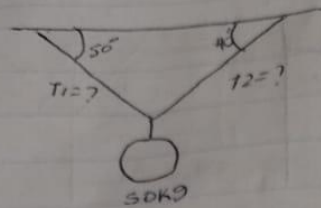
$$1.22 T_2 = 1200 \text{ N}$$

$$T_2 = 983.60$$

$$T_1 = 1.13 T_2 (983.60)$$

$$T_1 = 1,111.46$$

25-05-23.



$$T_{1x} = T_1 \cos 130^\circ$$

$$T_{1x} = -0.64 T_1$$

$$T_{1y} = T_1 \sin 130^\circ$$

$$T_{1y} = 0.76 T_1$$

$$T_{2x} = T_2 \cos 40^\circ$$

$$T_{2x} = 0.76 T_2$$

$$T_{2y} = T_2 \sin 40^\circ$$

$$T_{2y} = 0.64 T_2$$

$$\sum T_x = 0$$

$$T_{1x} + T_{2x} = 0$$

$$-0.64 T_1 + 0.76 T_2 = 0$$

$$\sum T_y = 0$$

$$T_{1y} + T_{2y} = 0$$

$$0.76 T_1 + 0.64 T_2 = 0$$

$$-0.64 T_1 + 0.76 T_2 = 0$$

$$-0.64 T_1 = 0.76 T_2$$

$$T_1 = \frac{0.76 T_2}{-0.64}$$

$$-0.64 T_1$$

$$T_1 = 1.18 T_2$$

$$0.76 T_1 + 0.64 T_2 = 0$$

$$0.76 T_1 (1.18 T_2) + 0.64 T_2 = 50 \text{ kg}$$

$$0.89 T_2 + 0.64 T_2 = 50 \text{ kg}$$

$$1.53 T_2 = 50 \text{ kg}$$

$$1.53 T_2$$

$$T_2 = 32.67 \text{ kg}$$

$$T_1 = 1.18 T_2 (32.67 \text{ kg})$$

$$T_1 = 38.55 \text{ kg}$$