

1-Masala

Berilgan

$$l_0 = 10 \text{ m} .$$

$$a_0 = 2 \frac{m}{s^2}$$

$$v_0 = 72 \frac{km}{h} = \frac{20m}{s}$$

$$l = 35 \text{ m}$$

S=?

$$l_1 = \frac{v_0^2}{2a_0} = \frac{400}{4} = 100$$

$$S_0 = l_1 + l_0 = 110 \text{ m}$$

$$S = S_0 * 49 = 5390 \text{ m}$$

Javob: 5390 m

2- masala

Berilgan

Q,U

$$q_n = |Q - 2CU|$$

C,2U

$$C_1 = \frac{Q}{U}$$

$$C_2 = C$$

$$C_n = C_1 + C_2$$

$$C_n = \frac{Q}{U} + C$$

$$W_n = \frac{q_n^2}{2C_n} = \frac{(Q - 2CU)^2}{2(\frac{Q}{U} + C)}$$

$$Q = W_1 + W_2 - W_n$$

$$Q = W_1 + W_2 - W_n = \frac{QU}{2} + 2CU^2 - \frac{(Q - 2CU)^2}{2(\frac{Q}{U} + C)}$$

$$Q = \frac{QCU^2}{2(Q + CU)}$$

Javob:

$$Q = \frac{QCU^2}{2(Q + CU)}$$

3-masala

Berilgan

$$P=26 \text{ kPa}$$

$$m=70 \text{ g}$$

$$t_0=1 \text{ min}=60 \text{ s}$$

$$n=78$$

$$\rho=1034 \text{ kg/m}^3$$

$$p = \frac{\rho v^2}{2}$$

$$v^2 = \frac{2p}{\rho}$$

$$W = \frac{mv^2}{2}$$

$$N = \frac{W}{t} = \frac{mv^2}{2t} = \frac{m}{t} * \frac{p}{\rho}$$

$$t = \frac{t_0}{n}$$

$$N = \frac{m}{t} * \frac{p}{\rho} = \frac{70 * 10^{-3} * 26 * 10^3 * 78}{1034 * 60} = 2,288 \text{ W}$$

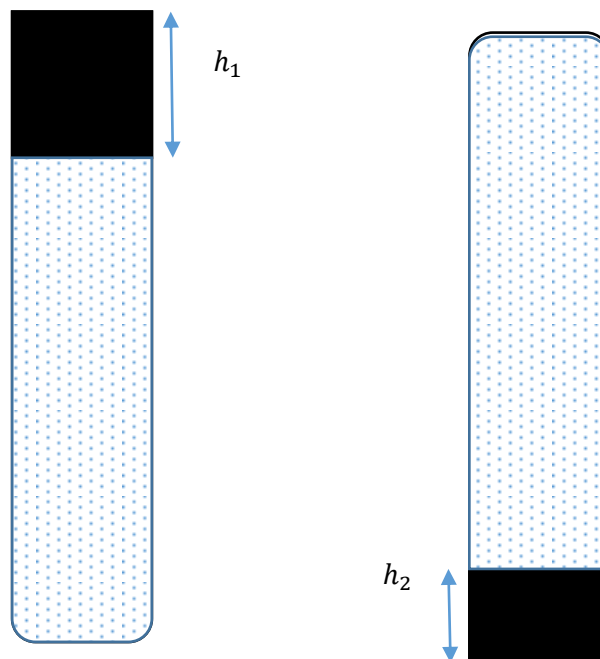
javob: $N = 2,288 \text{ W}$

4- masala

$$h_1 = 3 \text{ sm}$$

$$h_2 = 2 \text{ sm}$$

$$l = ?$$



$$T = const$$

$$P_1 V_1 = P_2 V_2$$

$$P_1 = P_0 + \rho g h_1$$

$$P_2 = P_0 - \rho gh_2$$

$$P_1 = P_0 + \rho gh_1 = 790 \text{ mm sim ust}$$

$$P_2 = P_0 - \rho gh_2 = 740 \text{ mm. sim ust}$$

$$V_1 = S(l - h_1)$$

$$V_1 = S(l - h_2)$$

$$P_1 * (l - h_1) = P_2 * (l - h_2)$$

$$790 * (l - 3) = 740(l - 2)$$

$$79l - 237 = 74l - 148$$

$$5l = 89$$

$$l = 17,8 \text{ sm}$$

Javob: l = 17,8 sm

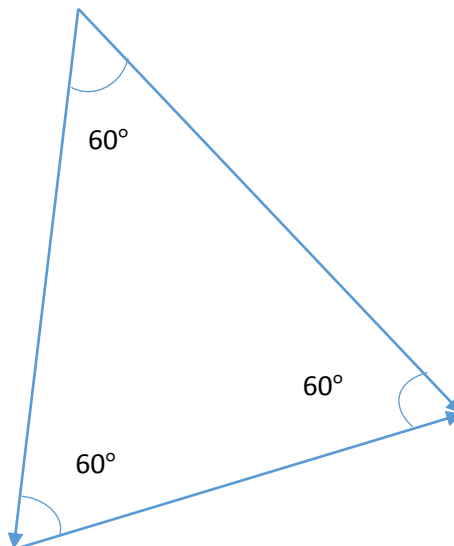
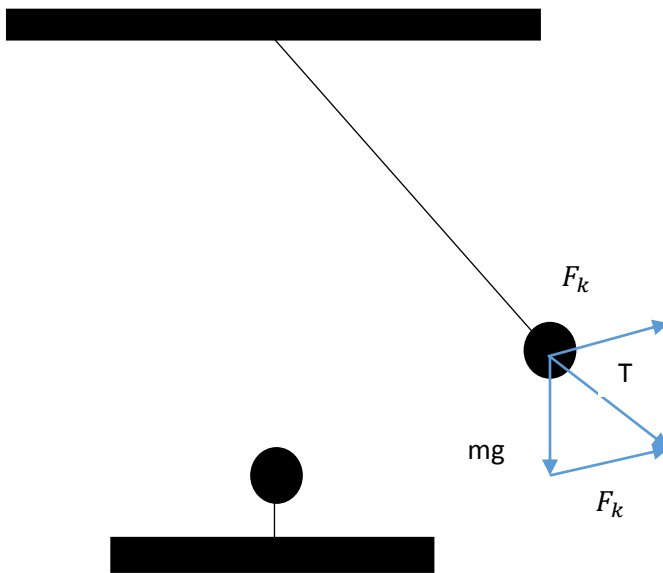
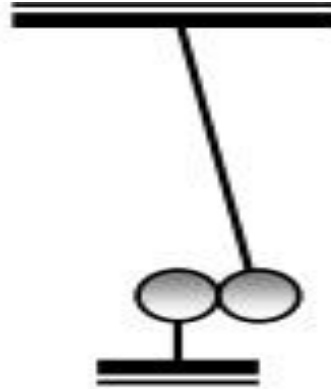
5- masala

Berilgan

$$m = 0,01 \text{ kg}$$

$$l = 30 \text{ sm}$$

$$\alpha = 60^\circ$$



Chizmadan ko'rinib turibdiki teng tomonli uchburchak hosil bo'ladi. Demak

$$F_k = mg$$

Bo'ladi. $R = l$ bo'ladi.

$$F_k = \frac{kq^2}{l^2} = mg$$

$$q = l * \sqrt{\frac{mg}{k}}$$

$$q = l * \sqrt{\frac{mg}{k}} = 0,3 * \sqrt{\frac{0,1}{9 * 10^9}} = 10^{-6}C = 1mkc$$

Javob: $q = 1mkc$