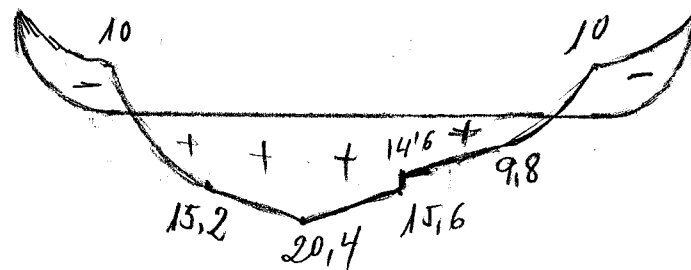
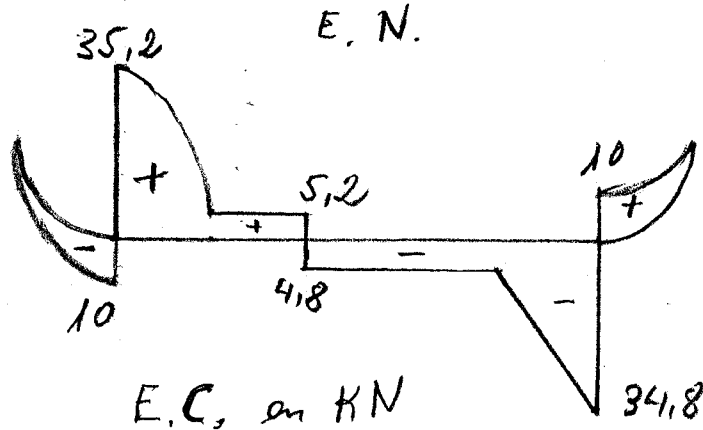
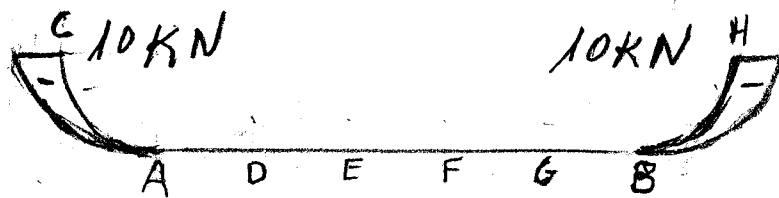


Examen de Elasticidad y Resistencia de Materiales 11/6/2001



$$H_A = 0$$

$$\sum V_A = 10 \times 6 + \frac{1}{2} \times 30 \times \frac{13}{3} + 10 \times 3 + 1 + 30 \times \frac{1}{2} - 10 = 226$$

$$\boxed{V_A = 45.2 \text{ KN}}$$

$$\sum V_B = 10 \times 1 + \frac{1}{2} \times 30 \times \frac{2}{3} + 10 \times 2 - 1 + 30 \times \frac{9}{2} + 10 \times 6 = 224$$

$$\boxed{V_B = 44.8}$$

$$N_{C-A} = -10 \cos \theta; \text{ hay simetría}$$

$$C_A = -10; C_D = 35.2 - 30 = 5.2$$

$$E_E = 5.2 - 10 = -4.8$$

$$H_A = -10; M_D = -10 \times 2 + 45.2 \times 1 - 30 \times \frac{1}{3} = 45.2 - 30 = 15.2$$

$$M_E = -10 \times 3 + 45.2 \times 2 - 30 \times \frac{4}{3} = 90.4 - 70 = 20.4; M_B = -10$$

$$M_G = -10 \times 2 + 44.8 \times 1 - 30 \times \frac{1}{2} = 44.8 - 35 = 9.8$$

$$M_F = -10 \times 4 + 45.2 \times 3 - 30 \times \frac{7}{3} - 10 \times 1 = 135.6 - 40 - 70 - 10 = 15.6$$