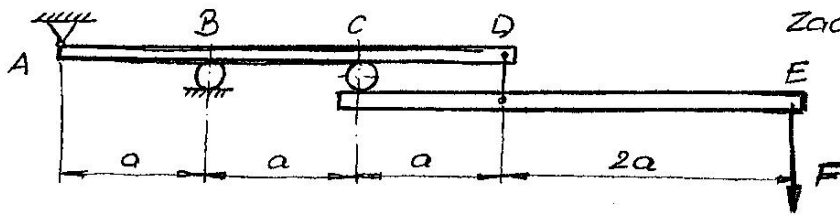
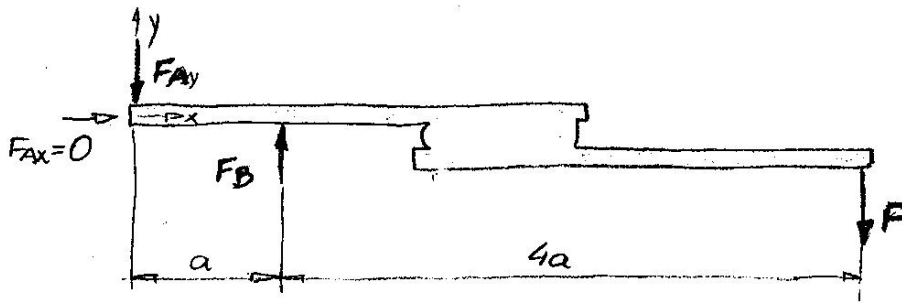


Konstrukcija prema slici sastoji se od dva štapa povezana prema slici. Odrediti sile u točkama A i B



Zadano: F

I NAČIN: Primjenjen princip SOLIDIFIKACIJE



$$\sum F_y = 0; -F_{Ay} + F_B - F = 0 \dots (1)$$

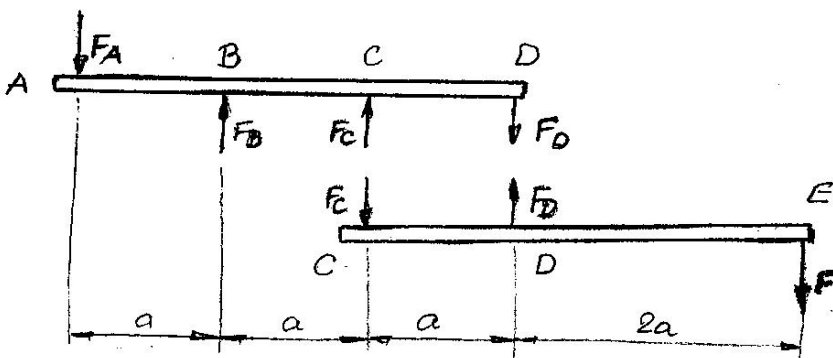
$$\sum M_A = 0; F_B \cdot a - F \cdot 5a = 0 \dots (2)$$

$$\text{iz (2)} \quad F_B = 5F$$

$$\text{iz (1)} \quad F_{Ay} = F_B - F$$

$$F_{Ay} = 4F$$

II NAČIN: Oslobađanje veza svakog od štapova posebno



Ravnoteža štapa \overline{CE}

$$\sum F_y = 0; -F_C + F_D - F = 0 \dots (3)$$

$$\sum M_C = 0; F_D \cdot a - F \cdot 3a = 0 \dots (4)$$

$$\text{iz (4)} \quad F_D = 3F$$

$$\text{iz (3)} \quad F_C = 2F$$

ZAKLJUČAK!

Ne traže se sile u točkama C i D, pa F_A i F_B dobivamo principom SOLIDIFIKACIJE

- Kad bi se tražile i sile F_C i F_D postavile se jedne

(1), (2), (5), (6)

Ravnoteža štapa \overline{AD}

$$\sum F_y = 0; -F_A + F_B + F_C - F_D = 0 \dots (5)$$

$$\sum M_A = 0; F_B \cdot a + F_C \cdot 2a - F_D \cdot 3a = 0 \dots (6)$$

$$\text{iz (6)} \quad F_B = 3F_D - 2F_C = 9F - 4F = 5F$$

$$\text{iz (5)} \quad F_A = F_B + F_C - F_D = 5F + 2F - 3F = 4F$$