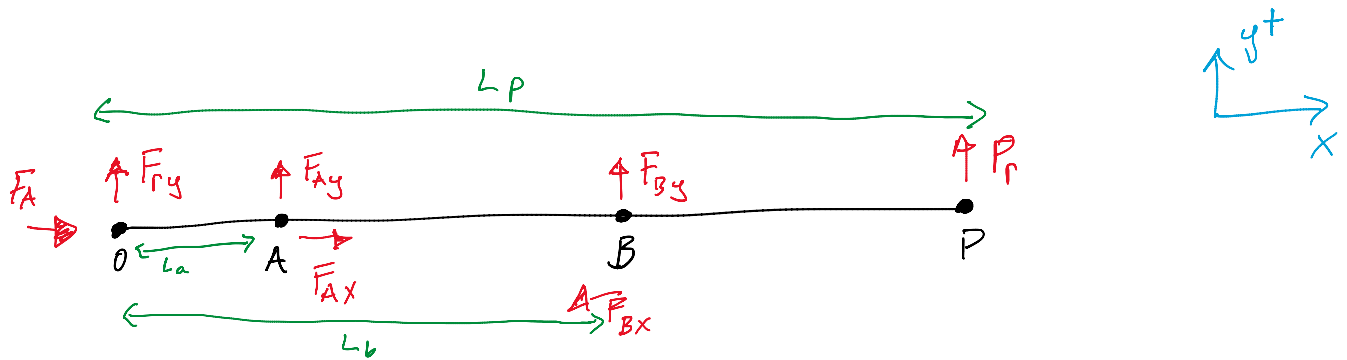


Project

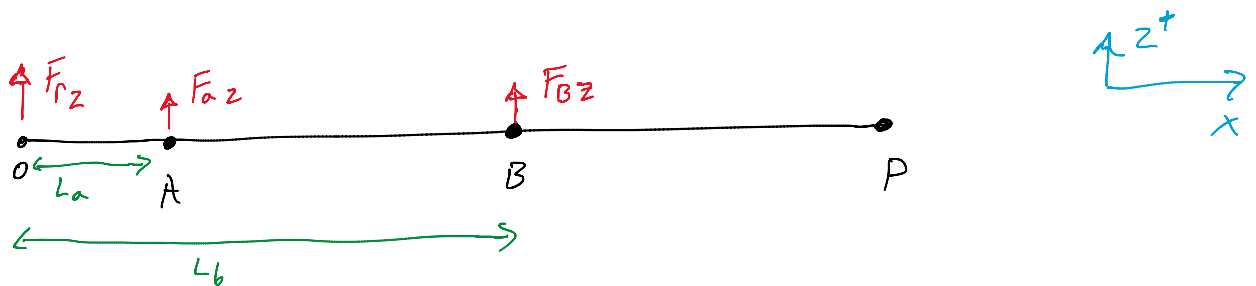
Monday, November 28, 2022 5:59 PM



$$\sum F_x = 0 = F_A + F_{Ax} - F_{Bx}$$

$$\sum F_y = 0 = F_y + F_{Ay} + F_{By} + P_r$$

$$\sum M_{az} = 0 = -(F_y \cdot L_a) + F_{By} \cdot (L_b - L_a) + P_r \cdot (L_p - L_a)$$



$$\sum F_z = 0 \quad F_{rz} + F_{az} + F_{Bz}$$

$$\sum M_{ay} = 0 = -(F_{rz} \cdot l_a) + F_{Bz} \cdot (L_b - L_a)$$

La - 70

Lb - 240

L10 = 1440

Ar = 30800/17 = 1811.7647

Ax = 600

Ea = Ax/Ar = 600/2000 = 0.3

POA = 2000*3 = 6000

$(14*600)/17900 = 0.4693$

$0.56*2000 + 1.89*600 = 2254$

$(15.3*600)/15200 = 0.6039$

$0.56*2000 + 1.78*600 = 2188$

$(20900/2188)^3 = 871.5592$

$(29100/2254)^3 = 2151.876$

6208 Better

6908

$17900/2254 = 9.8799$

$15200/2188 = 6.947$

Br = 17200/17 = 1011.7647

Bx = 200

Eb = Bx/Br = 200/1280 = 0.1563

POB = 1280*3 = 3840

$(15.3*200)/11500 = 0.2661$

$(17600/1280)^3 = 2599.6094$

$10000/1011.7647 = 9.8837$

$10900/1011.7647 = 10.7733$

