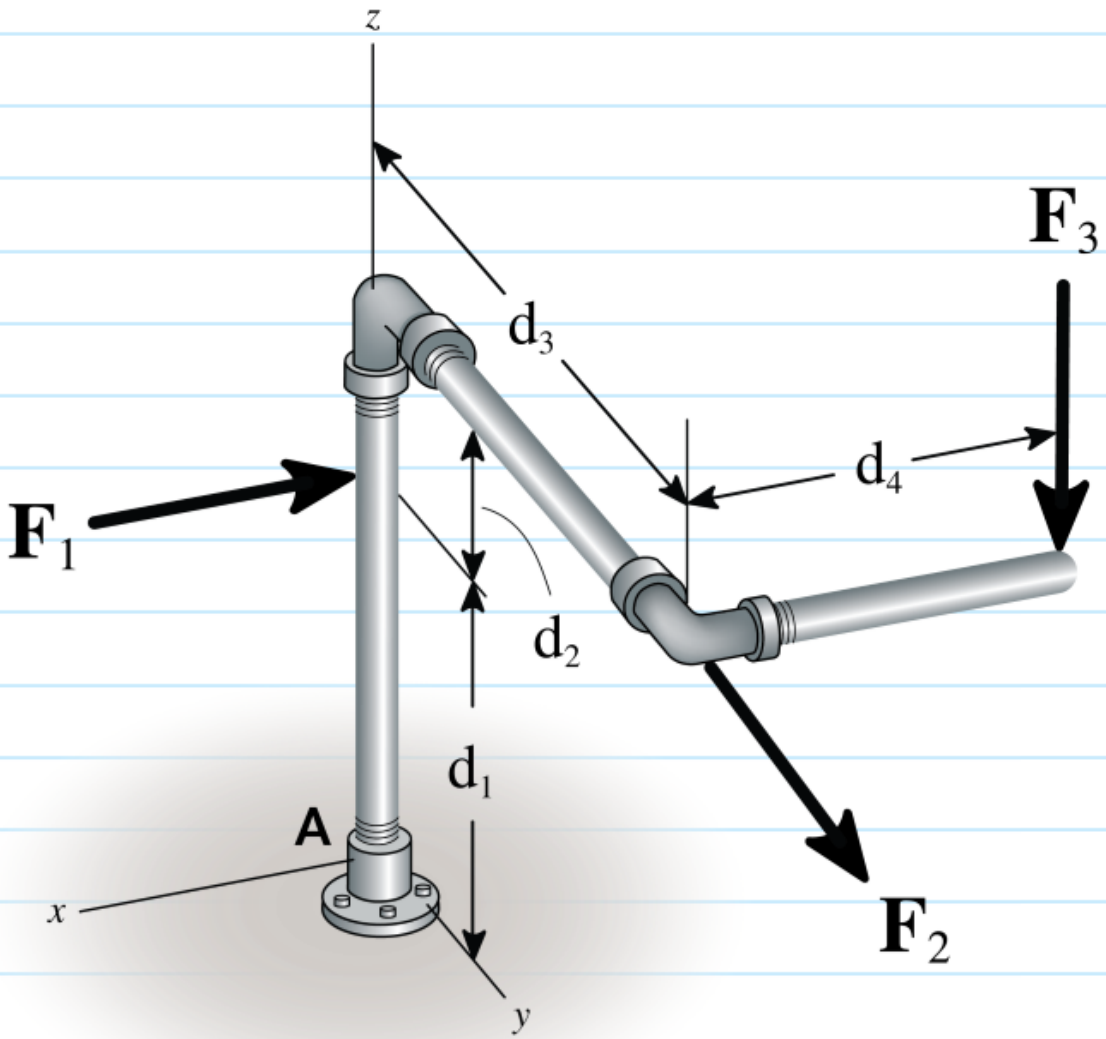
21-S-4-5-GD-001



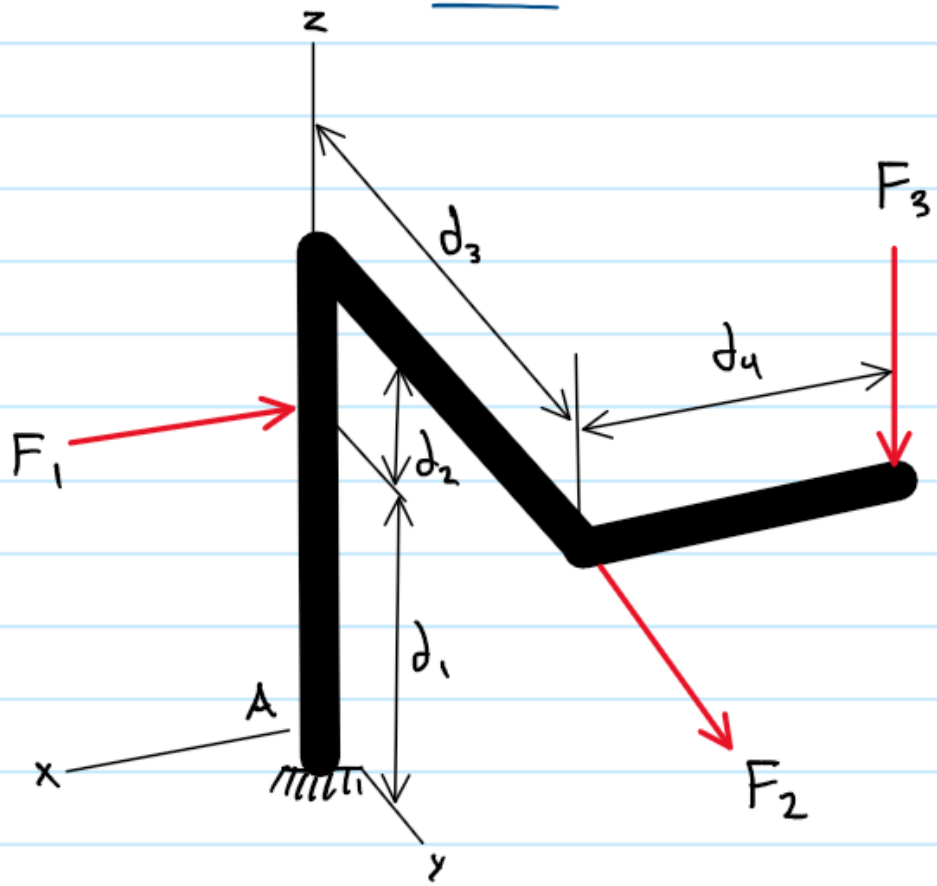
What is the moment of the force about the x, y, and z axes?

($F_1 = \underline{F_1}$ N, $F_2 = \underline{F_2}$ N, $F_3 = \underline{F_3}$ N, $d_1 = \underline{d_1}$ m, $d_2 = \underline{d_2}$ m, $d_3 = \underline{d_3}$ m, and $d_4 = \underline{d_4}$ m)

given $F_1, F_2, F_3, d_1, d_2, d_3, d_4$

find M_x, M_y, M_z

FBD



Moments

$$+\circlearrowleft M_x = -(d_1+d_2)F_2 - (d_3)F_3$$

$$+\circlearrowleft M_y = -(d_1)F_1 - (d_4)F_3$$

$$+\circlearrowleft M_z = 0$$