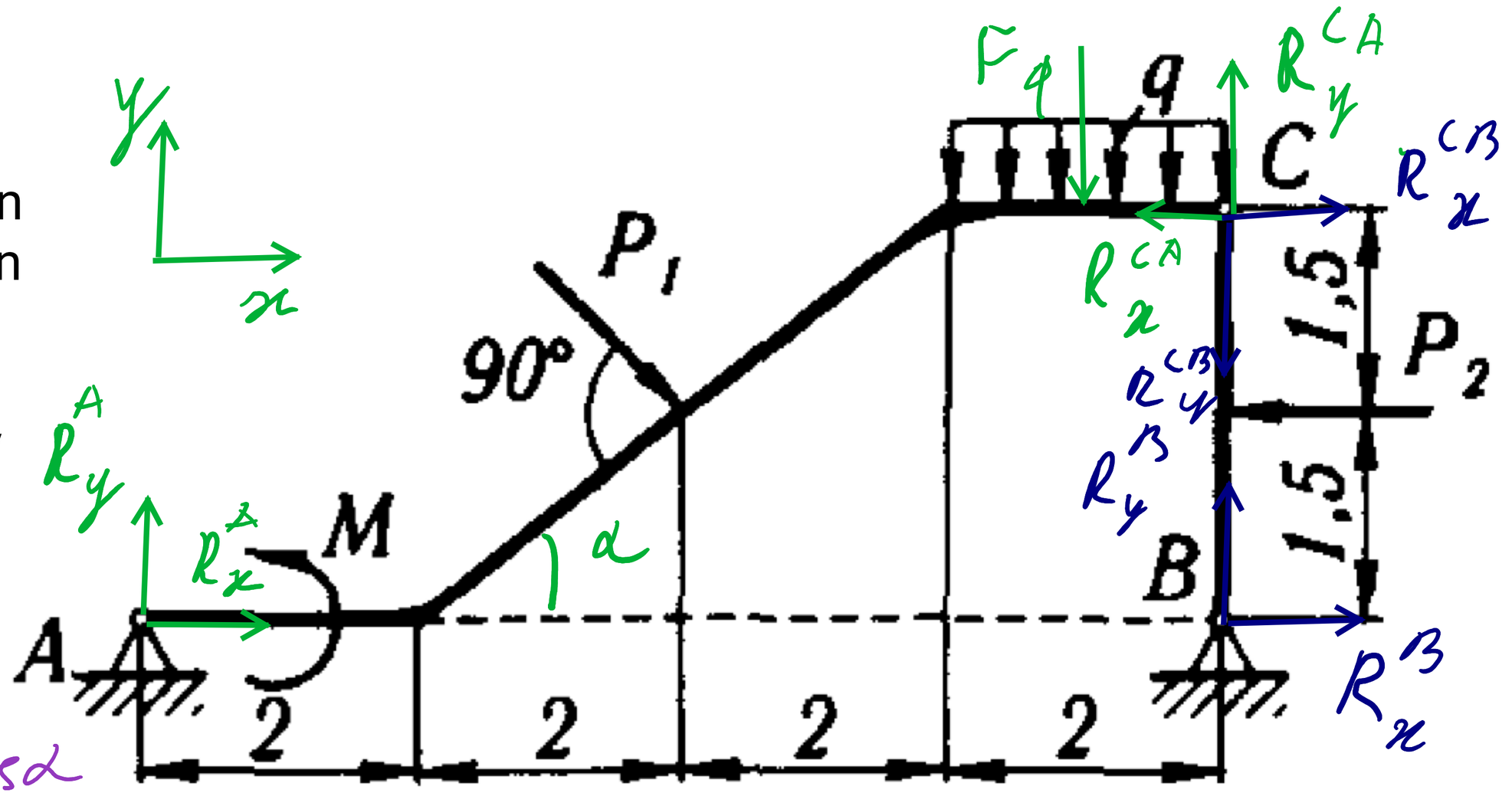
Research Object:
2 rigid bodies
AC - rotation motion
CB - rotation motion
Supports:
A - pin - Rx, Ry
C - rot. joint - Rx, Ry
B - pin - Rx, Ry



Force Analysis:

M

$P_1 \uparrow \quad P_{1x} = P_1 \cos\alpha$

$P_1 \rightarrow \quad P_{1y} = -P_1 \sin\alpha$

$q \rightarrow \quad F_q = q \cdot 2$

P_2

$R_x^A, R_y^A - ?$

$R_x^B, R_y^B - ?$

$R_x^{CA}, R_y^{CA} = R_x^{CB}, R_y^{CB} = R_x^C, R_y^C$

SOLUTION
1st body:

$\alpha = tg\left(\frac{3}{4}\right) \uparrow$

$x: R_x^A + P_1 \cos\alpha - R_x^C = 0$

$y: R_y^A - P_1 \sin\alpha + R_y^C - F_q = 0$

$M^A: M - P_1 \sin\alpha \cdot 4 - F_q \cdot 7 + R_y^C \cdot 3 + P_1 \cos\alpha \cdot 1.5 = 0$

2bd body:

$x: R_x^B + R_x^C - P_2 = 0$

$y: -R_y^C + R_y^B = 0$

$M^B: P_2 \cdot 1.5 - R_x^C \cdot 3 = 0$

Summary: 6 equations - 6 variables. Done