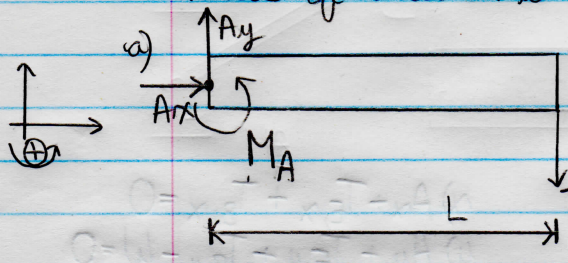
Wednesday, October 5th, 2016

Forces of wall on to the beam?

a)



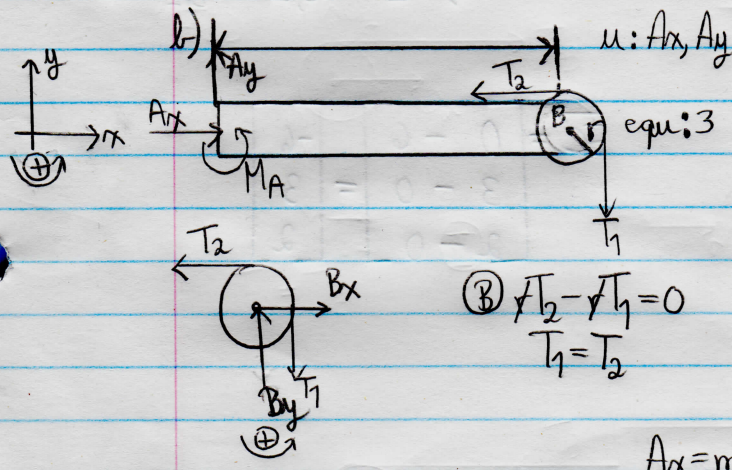
u: Ax, Ay, MA, T

$A_x = 0$

$A_y = mg$

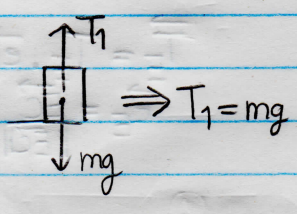
$M_A = L \cdot mg$

b)



u: Ax, Ay, MA, T1, T2

equ: 3



$\Rightarrow T_1 = mg$

Ⓑ $rT_2 - rT_1 = 0$

$T_1 = T_2$

$A_x = mg$

$A_y = mg$

$M_A = L \cdot mg$

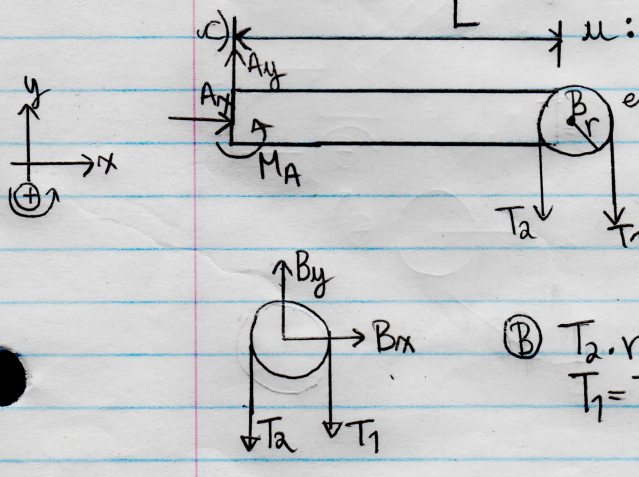
x) $A_x - T_2 = 0$

y) $A_y - T_1 = 0$

Ⓐ z) $-T_1(L+r) + T_2 \cdot r + M_A = 0$

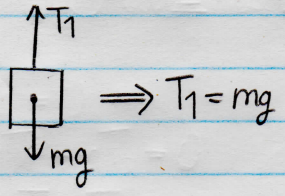
$M_A = T_1 L = mg \cdot L$

c)



u: Ax, Ay, MA, T1, T2

equ: 3



$\Rightarrow T_1 = mg$

Ⓑ $T_2 \cdot r - T_1 \cdot r = 0$

$T_1 = T_2$

x) $A_x = 0$

y) $A_y - T_1 - T_2 = 0$

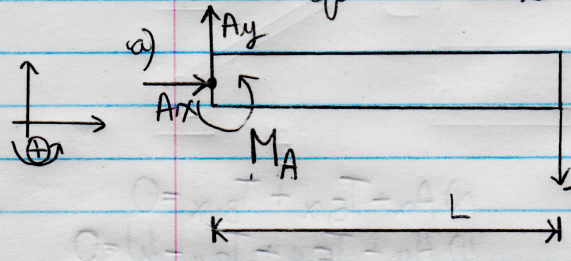
Ⓐ z) $M_A - T_2(L-r) - T_1(L+r) = 0$

$M_A = mg(L - r + L + r)$

Wednesday, October 5th, 2016

Forces of wall on to the beam?

a)



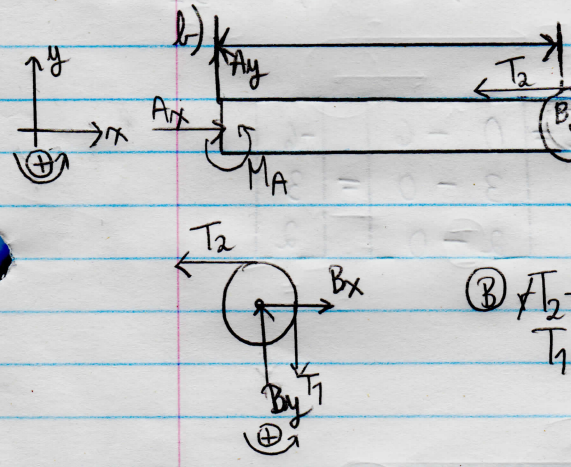
u: Ax, Ay, MA, T

$A_x = 0$

$A_y = mg$

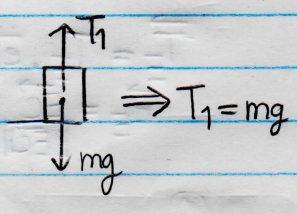
$M_A = L \cdot mg$

b)



u: Ax, Ay, MA, T1, T2

equ: 3



$\Rightarrow T_1 = mg$

(B) $r T_2 - r T_1 = 0$

$T_1 = T_2$

$A_x = mg$

$A_y = mg$

$M_A = L \cdot mg$

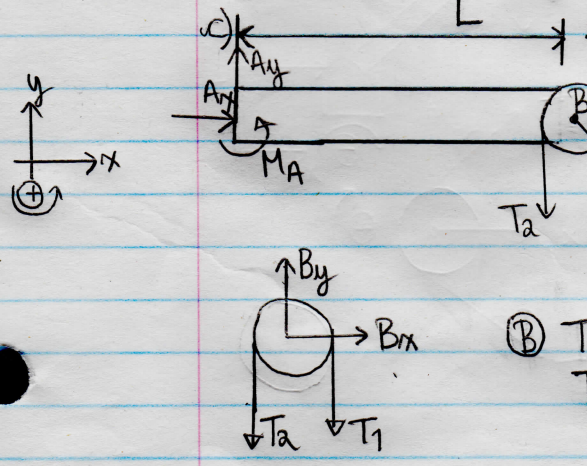
x) $A_x - T_2 = 0$

y) $A_y - T_1 = 0$

(A) z) $-T_1(L+r) + T_2 \cdot r + M_A = 0$

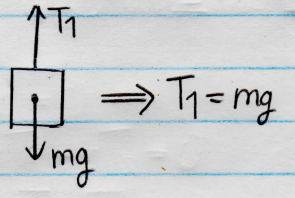
$M_A = T_1 L = mg \cdot L$

c)



u: Ax, Ay, MA, T1, T2

equ: 3



$\Rightarrow T_1 = mg$

(B) $T_2 \cdot r - T_1 \cdot r = 0$

$T_1 = T_2$

x) $A_x = 0$

y) $A_y - T_1 - T_2 = 0$

(A) z) $M_A - T_2(L-r) - T_1(L+r) = 0$

$M_A = mg(L - r + L + r)$