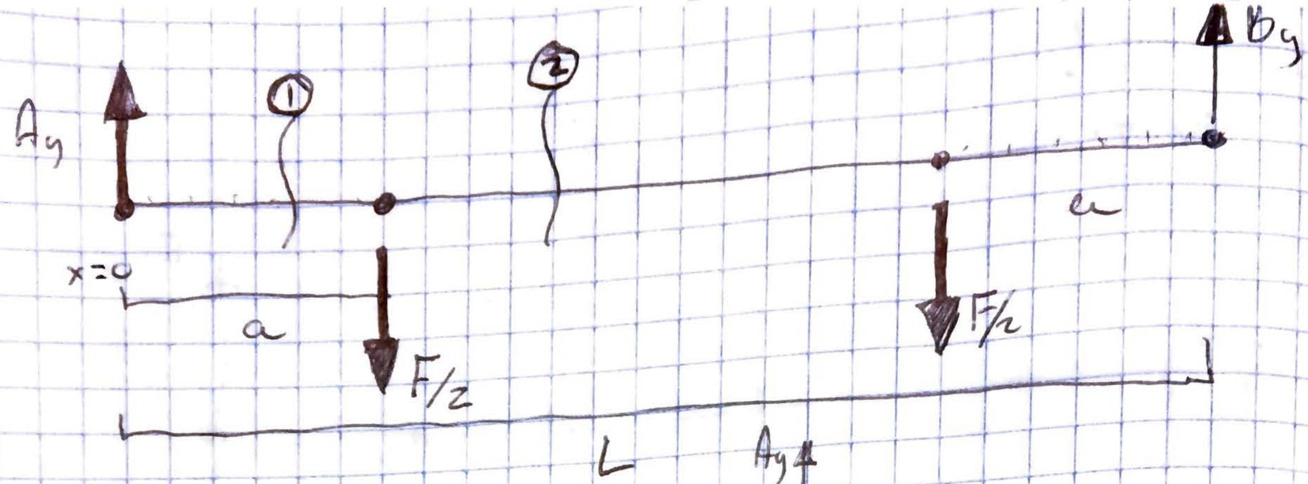
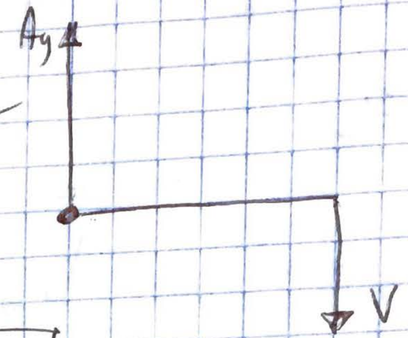


- for segment 1 we have



$\Sigma F_y = A_y - V = 0$

$V = A_y$

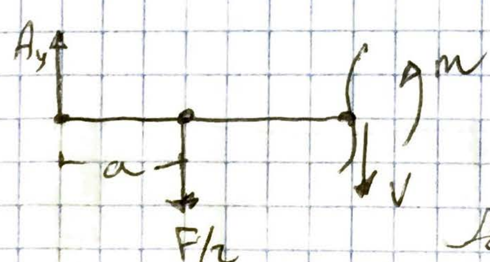
for $x = 0$ to $\boxed{x < a}$

since symmetrical we can say

$V = A_y = F/2$ for $x = 0$ to $x < a$
and
$x > L - a$ to $x = L$

~~finally, V(x)~~

- for segment 2 we have



$\Sigma F_y = A_y - \frac{F}{2} - V = 0$

$V = 0$ ∴

for $x = a$ to $x = L/2$

and since symmetrical
for $x = a$ to $x = L - a$

finally,

$$\boxed{V(x) = \begin{cases} F/2 & x = 0 \text{ to } x < a \\ & x > L - a \text{ to } x = L \\ 0 & x = a \text{ to } x = L - a \end{cases}}$$

for segment 1

$\sum M_A = -xV(x) + M(x) = 0$

$M(x) = xV(x)$ for $x = 0$ to $x < a$
and since symm.
for $x > L-a$ to $x = L$

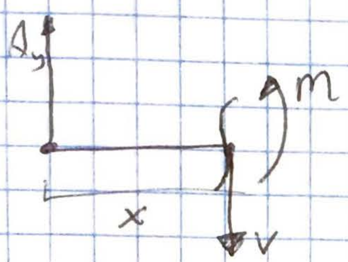
for segment 2

$\sum M_A = -(a)\left(\frac{F}{2}\right) - xV(x) + M(x) = 0$

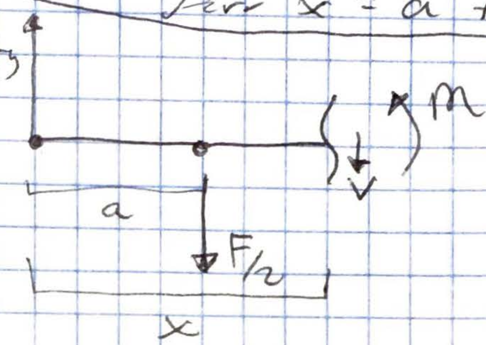
$M(x) = a\frac{F}{2} + x\cancel{V(x)}^{\,0}$

for $x = a$ to $\frac{L}{2}$
and since symmetrical
for $x = a$ to $x < L-a$

Seg. 1



Seg. 2



final layout: