dead live
2. $g = 15\,kN/m$ $q = 10\,kN/m$

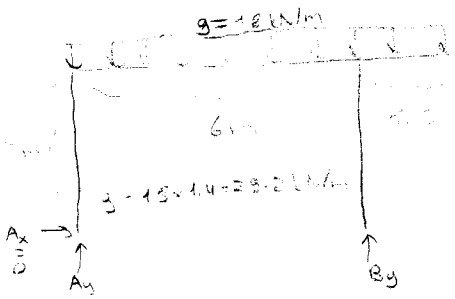
Since the question doesn't talk about W(wind load), H(earth pressure) etc. These loads can be ignored in this problem. We should consider these types combinations and use the most critical results.

$F_d = 1.4G + 1.6Q$

$F_d = 1.0G + 1.0Q + 1.0E$

Lets start by considering $F_d = 1.4G + 1.6Q$

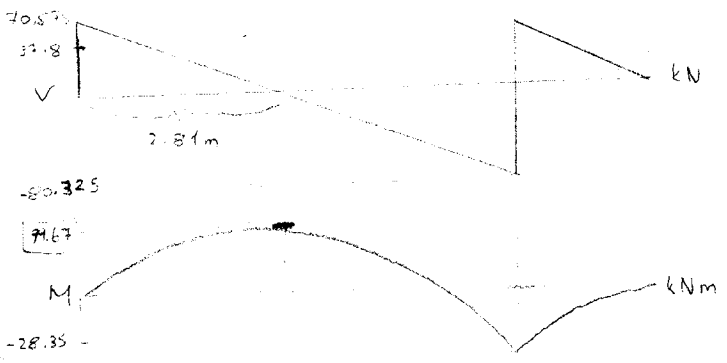
First check out G load (or 1.4G)



$\Sigma M_B = 0 \Rightarrow A_y(6) - 21(7.5)(2.25) = 0$

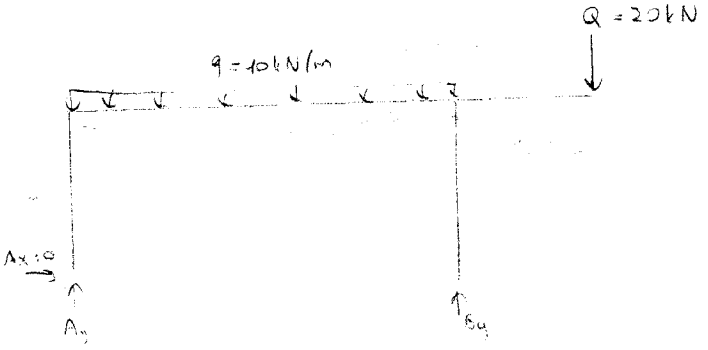
$\Rightarrow A_y = 70.875\,kN$ //

$\Sigma F_y = 0 \Rightarrow A_y + B_y = 189 \Rightarrow B_y = 118.125\,kN$ //



Now that we've found max and min moment we should now do it according to the live load. (1.6Q)

Assuming the Q load cannot move, we arrange the q load so that we obtain the maximum moment below:



$q = 1.6 \times 10 = 16\,kN/m$

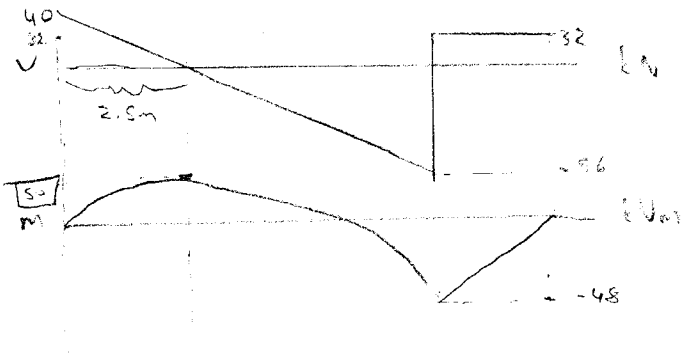
$Q = 20 \times 1.6 = 32\,kN$

$\Sigma M_B = 0 \Rightarrow (16)(6)(3) - (A_y)(6) - 32(1.5) = 0$

$A_y = 40\,kN$

$\Sigma F_y = 0 \quad A_y + B_y = (16)(6) + 32$

$\Rightarrow B_y = 88\,kN$



$F_d = 1.4G + 1.6Q$

we already calculated G & Q with 1.4 & 1.6 respectively. The maximum moments we found were'nt on the same spot but they are close enough to assume on the same spot. It will take us a lot of work to find the real max moment but since we are good engineers we take the easier and safer way and assume the max moment is, max V = 50 kN

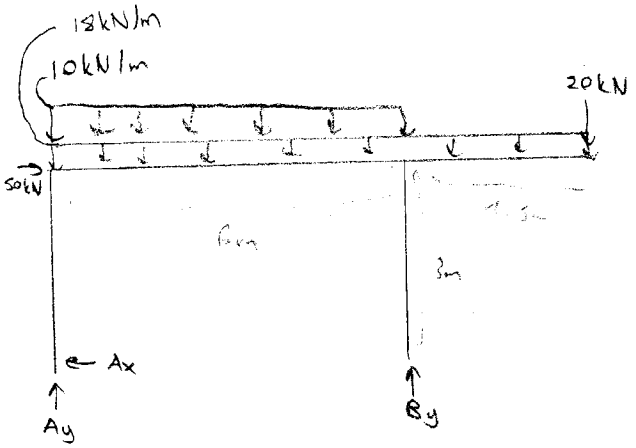
$99.67 + 50 = 149.67\,kNm$ //

Now lets try with the other standard including Eearthquake load.

$F_d = 1.0G + 1.0Q + 1.0E$ (back of the page)

$1.0G + 1.0Q + 1.0E = F_D$

Use all 3 of the loads together



$\Sigma F_x = 0 \Rightarrow A_x = 50kN$ //

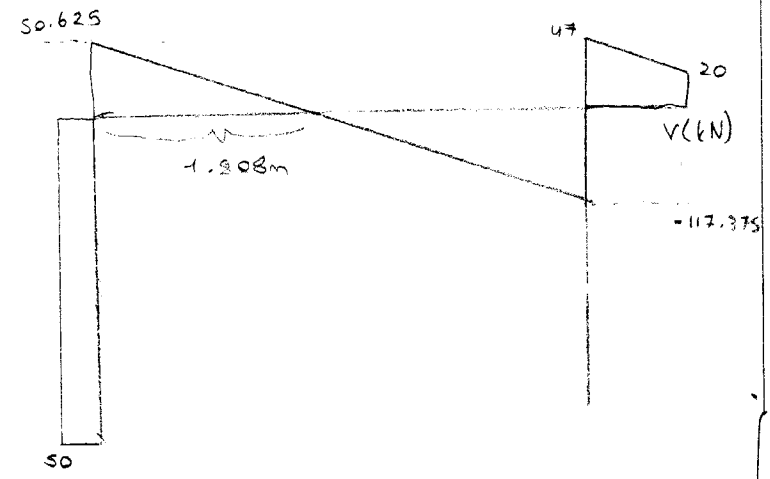
$\Sigma M_A = 0 \Rightarrow$

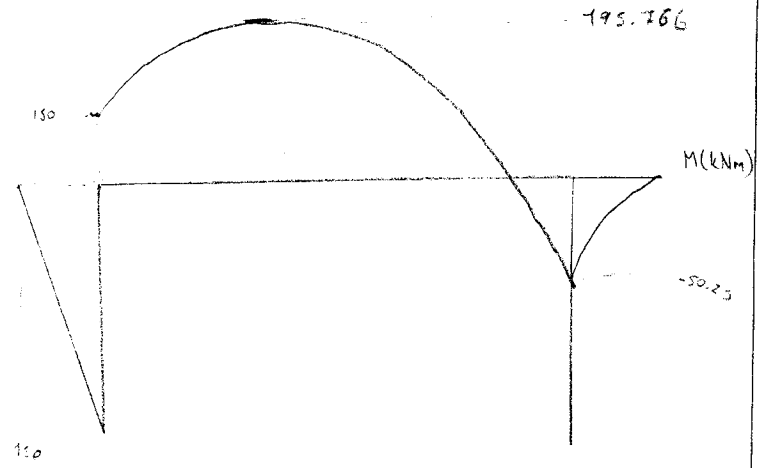
$(50)(3) + (10)(6)(3) + (18)(7.5)(7.5/2) + (20)(7.5) - B_y(6) = 0$

$\Rightarrow B_y = 164.375kN$ //

$\Sigma F_y = 0 \Rightarrow A_y + B_y = (20) + (10)(6) + (18)(7.5)$

$\Rightarrow A_y = 50.625kN$





The second method had a much more critical result so we should desing our building according to it.

for the columns

design $M = 150kNm$

design $V = 50kN$

for the beams

design $M = 200kNm$

design $V = 120kNm$

it is always better EASIER to use rounded numbers because we are engineers and we like to play it safe =)