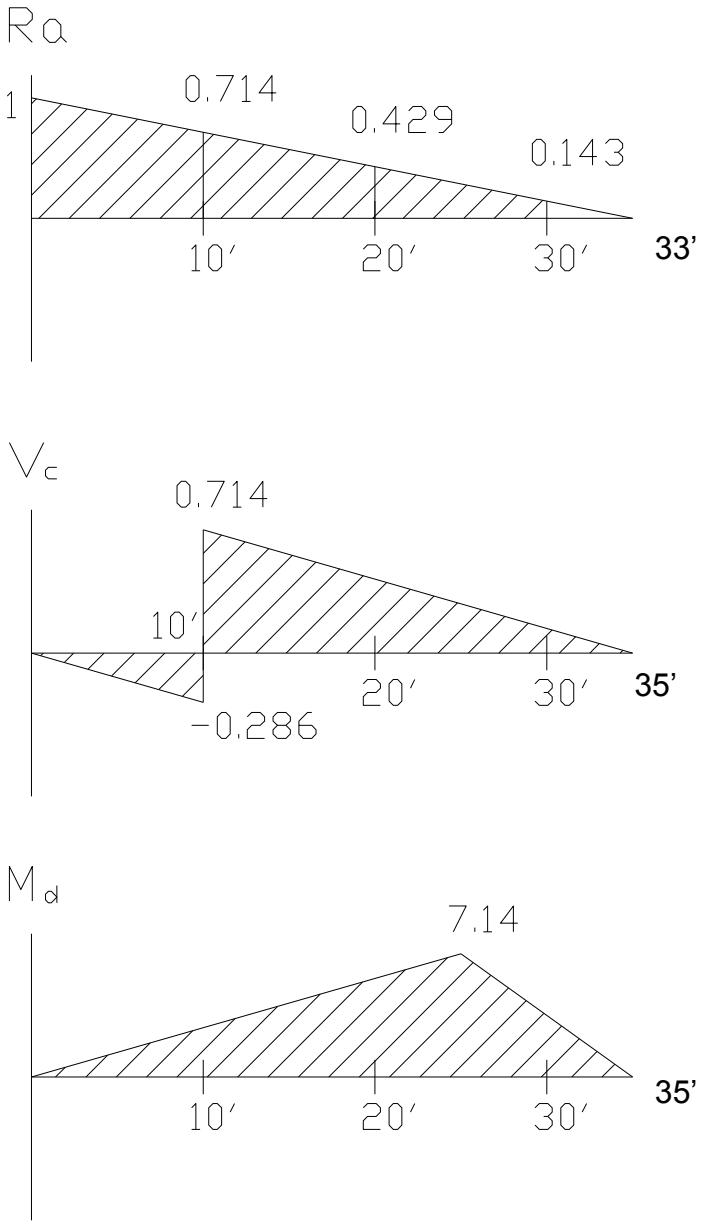
CE 371 Section 001

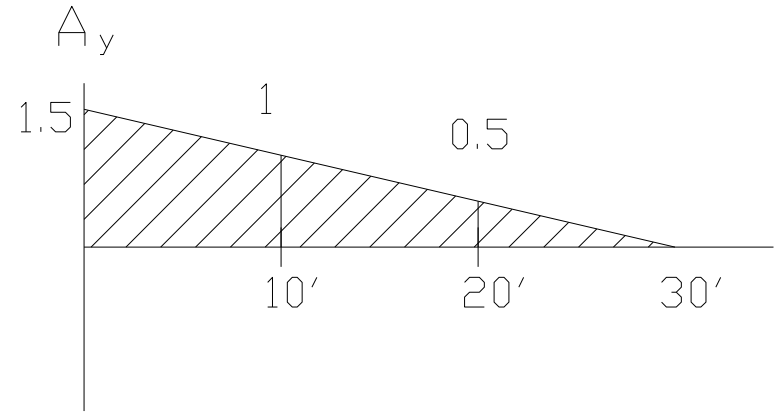
HW No. 12

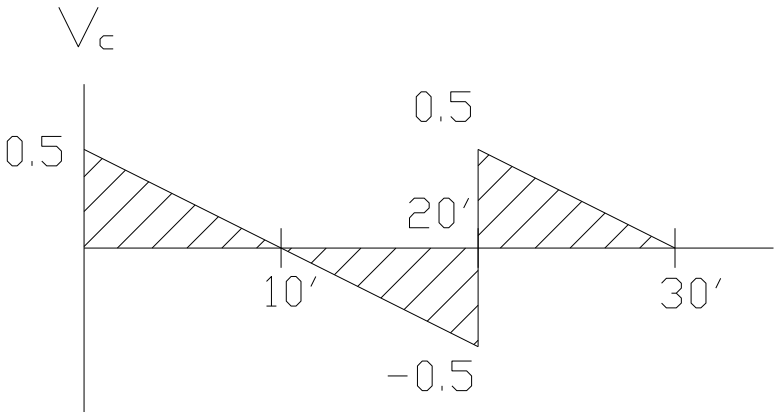
1) 6-1

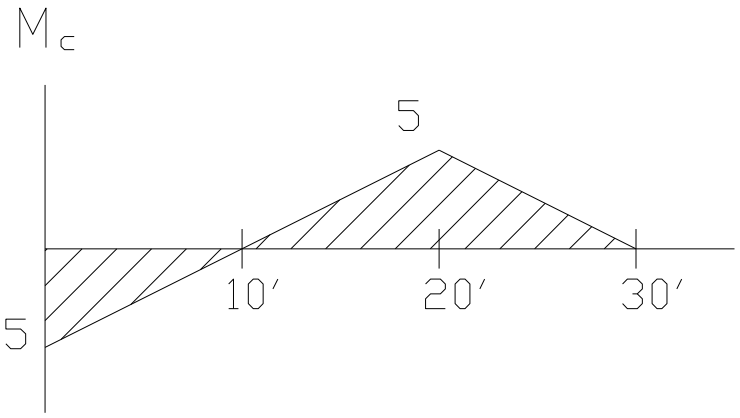


(Points 10)

2) 6-7

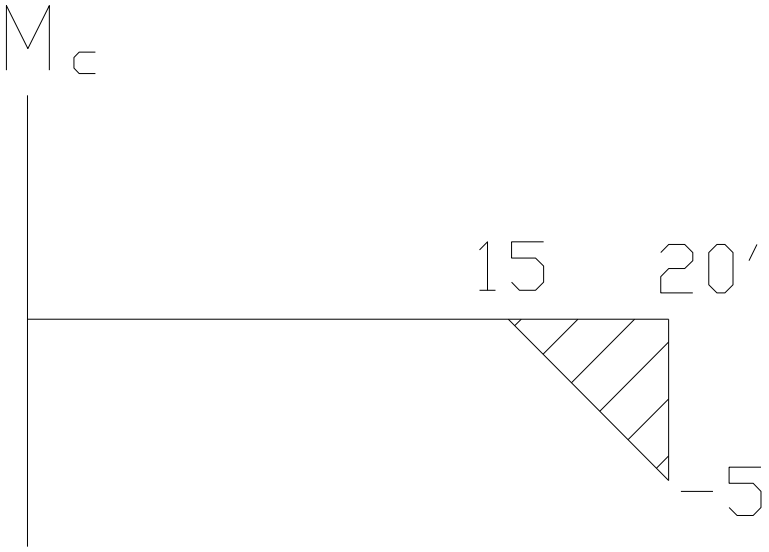






(Points 10)

3) 6-9



(Points 10)

4) 6-20

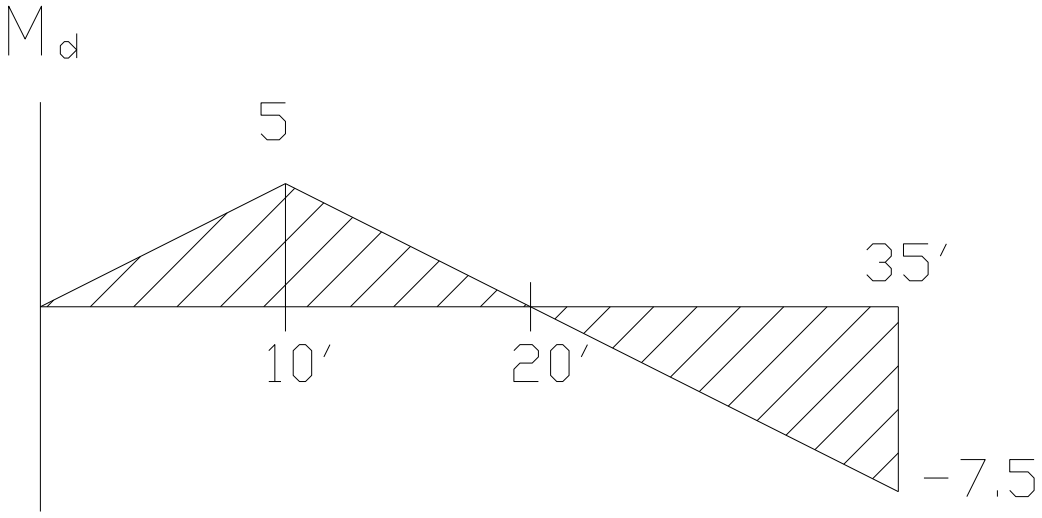
Sol:

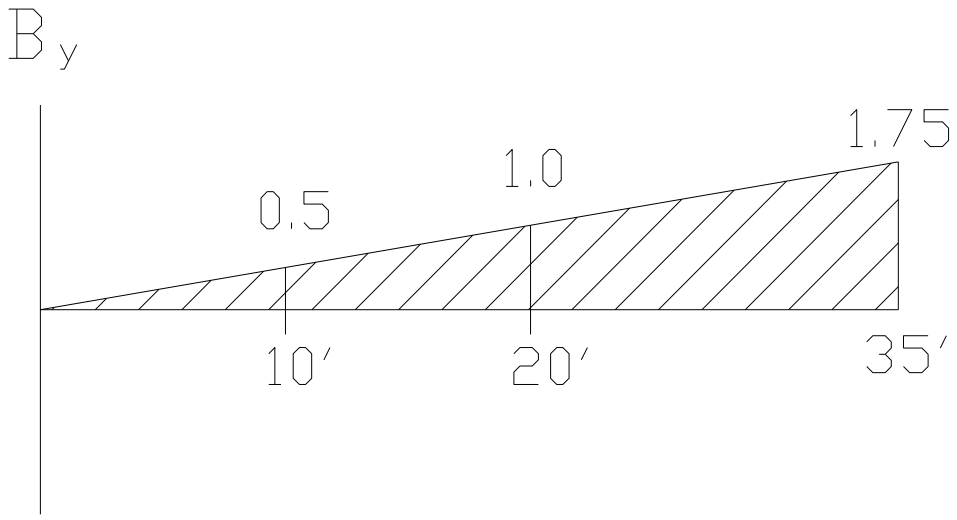
MDmax(+) = 80(1/2)(5)(20) + 500(5)

= 6500lbft = 6.50k.ft Ans

BYmax(+) = 80(1/2)(1.75)(35) + 500(.75)

= 3325lb = 3.32k Ans

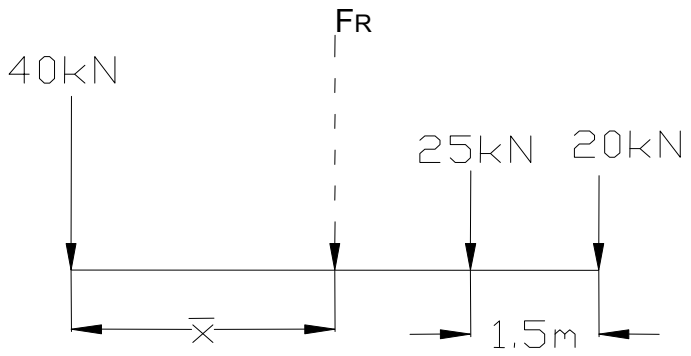


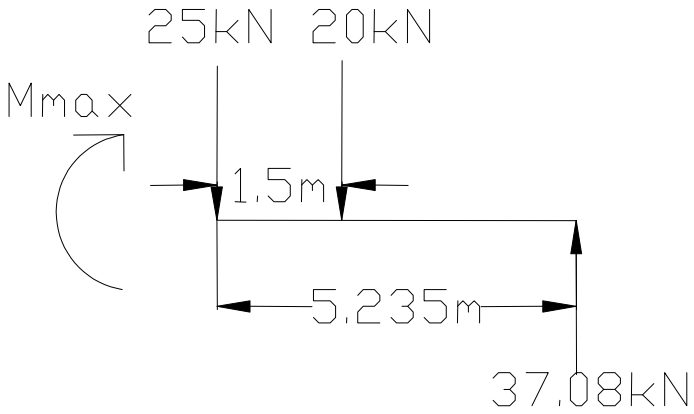


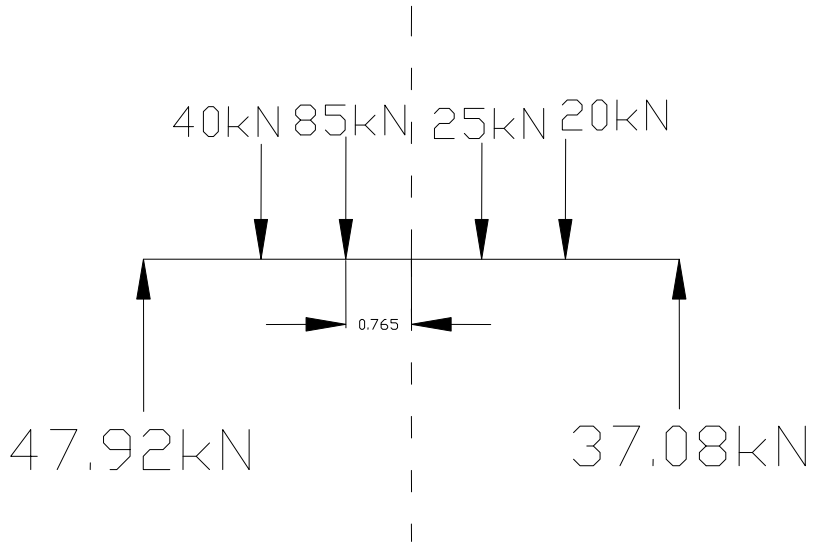
(Points 10)

5) 6-73

Sol:







$F_R = \sum F = 40 + 25 + 20 = 85kN$

$\bar{x} = [4(25) + 5.5(20)]/85 = 2.47m$

$M_{max} = 37.08(5.235) - 20(1.5) = 164kN$ Ans (Points 10)