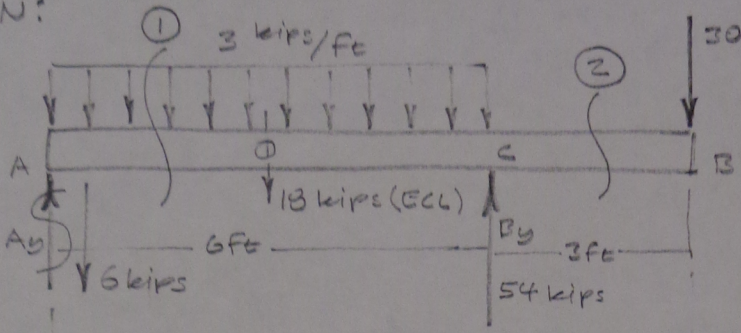
GIVEN:



$\Sigma M_A = 0$

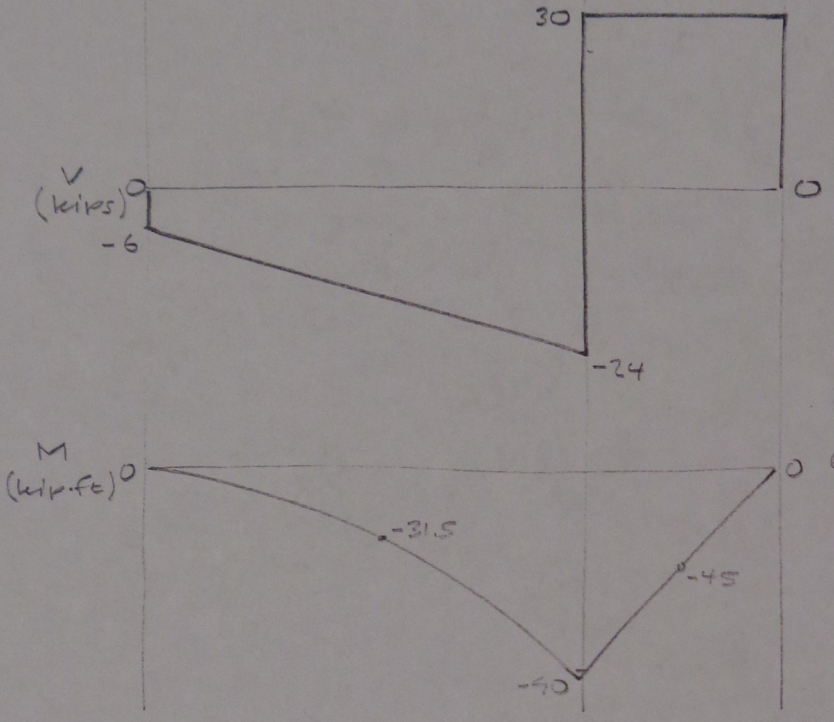
$-\overleftarrow{18(3)} + By(6) - \overleftarrow{9(30)} = 0$

$By = \underline{54 \text{ kips}}$

$\Sigma M_B = 0$

$-\overleftarrow{Ay(6)} + \overleftarrow{18(3)} - \overleftarrow{3(30)} = 0$

$Ay = \underline{-6 \text{ kips}}$



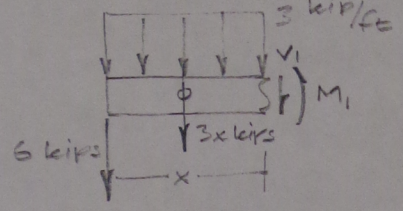
x	V	M
0	-6	0
3	-15	-31.5
6	-24	-90

x	V	M
6	30	-90
7.5	30	-45
9	30	0

$\boxed{V_{max} = 30 \text{ kips}}$

$\boxed{M_{max} = 90 \text{ kip·ft}}$

FOR CUT ① $0 \le x < 6$ ft



$\Sigma M_{CUT} = 0$

$\overleftarrow{6x} + \overleftarrow{3x\left(\frac{x}{2}\right)} + M_1 = 0$

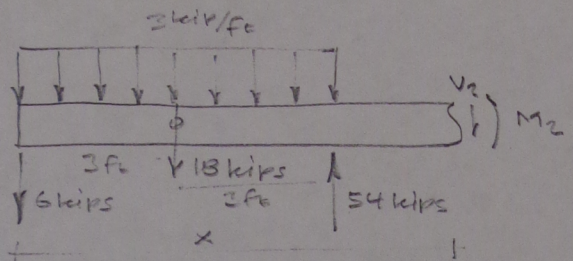
$M_1 = \underline{-6x - 1.5x^2 \text{ kip·ft}}$

$\Sigma F_y = 0$

$-6 - 3x - V_1 = 0$

$V_1 = \underline{-6 - 3x \text{ kips}}$

FOR CUT ② $6 \le x \le 9$



$\Sigma M_{CUT} = 0$

$\overleftarrow{6x} + \overleftarrow{18(x-3)} - \overleftarrow{54(x-6)} + M_2 = 0$

$M_2 = (54 - 6 - 18)x + 3(18) - 54(6)$

$= \underline{30x - 270 \text{ kip·ft}}$

$\Sigma F_y = 0$

$-6 - 18 + 54 - V_2 = 0$

$V_2 = \underline{30 \text{ kips}}$