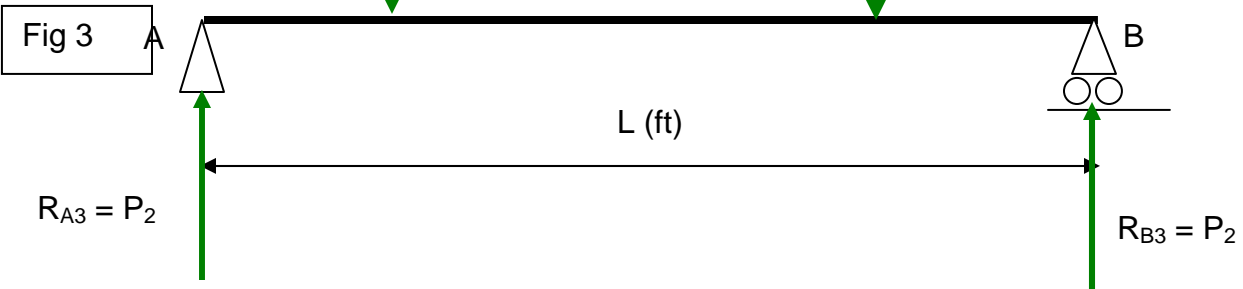
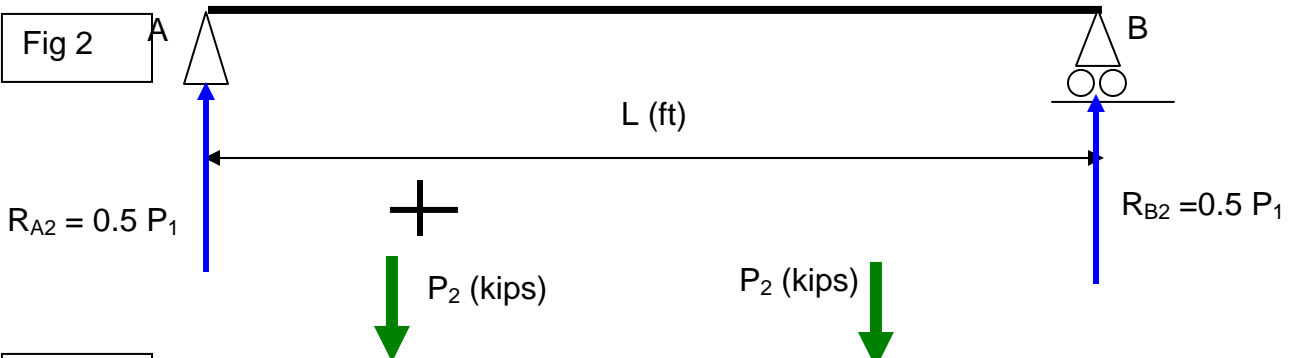
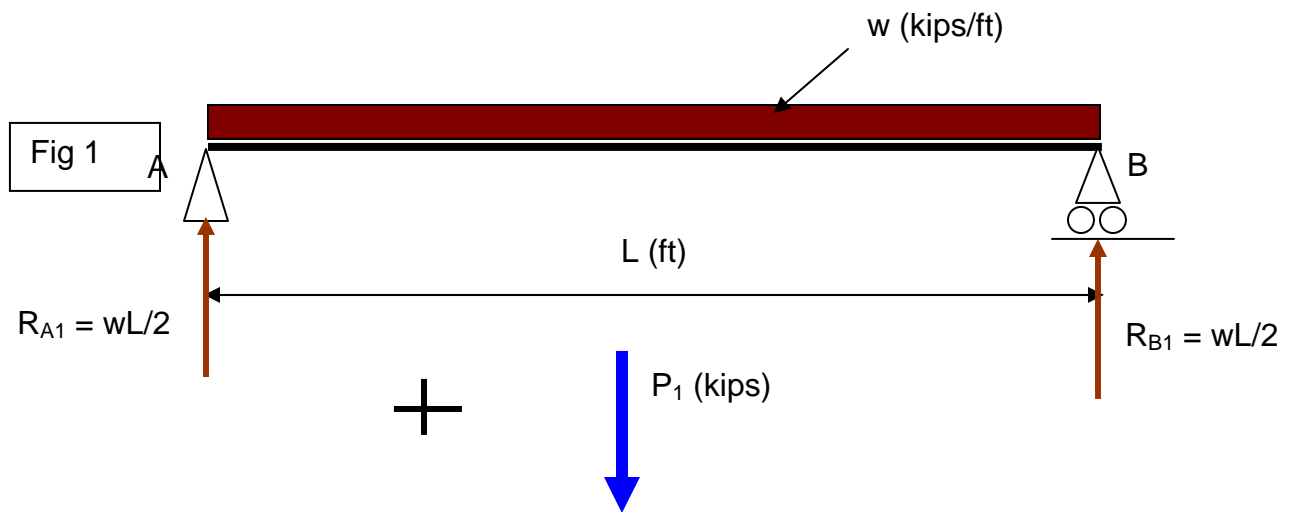
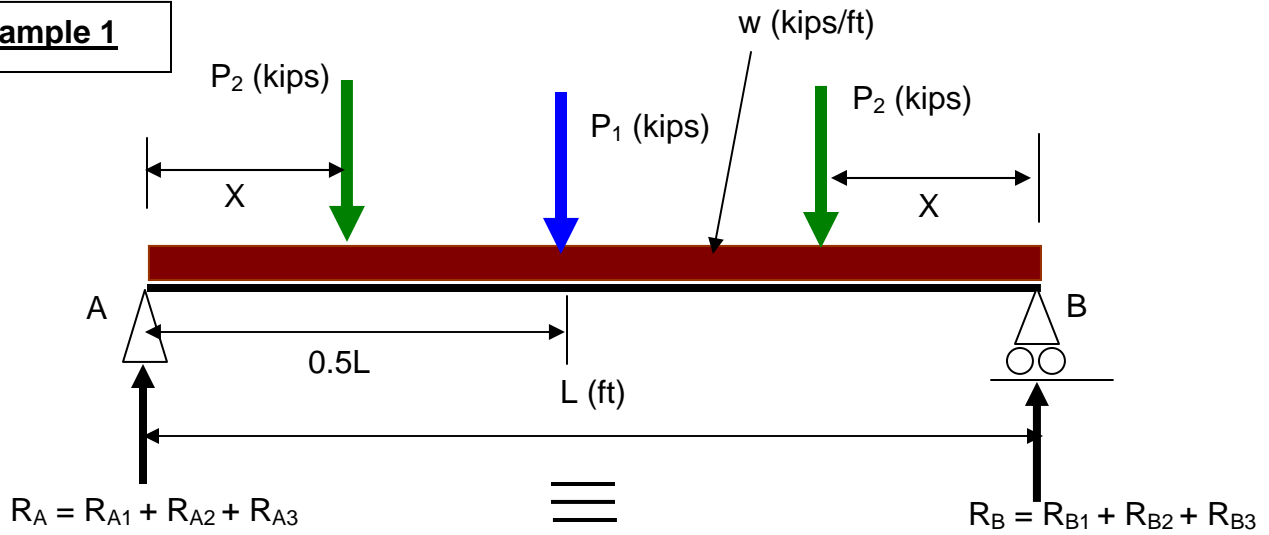
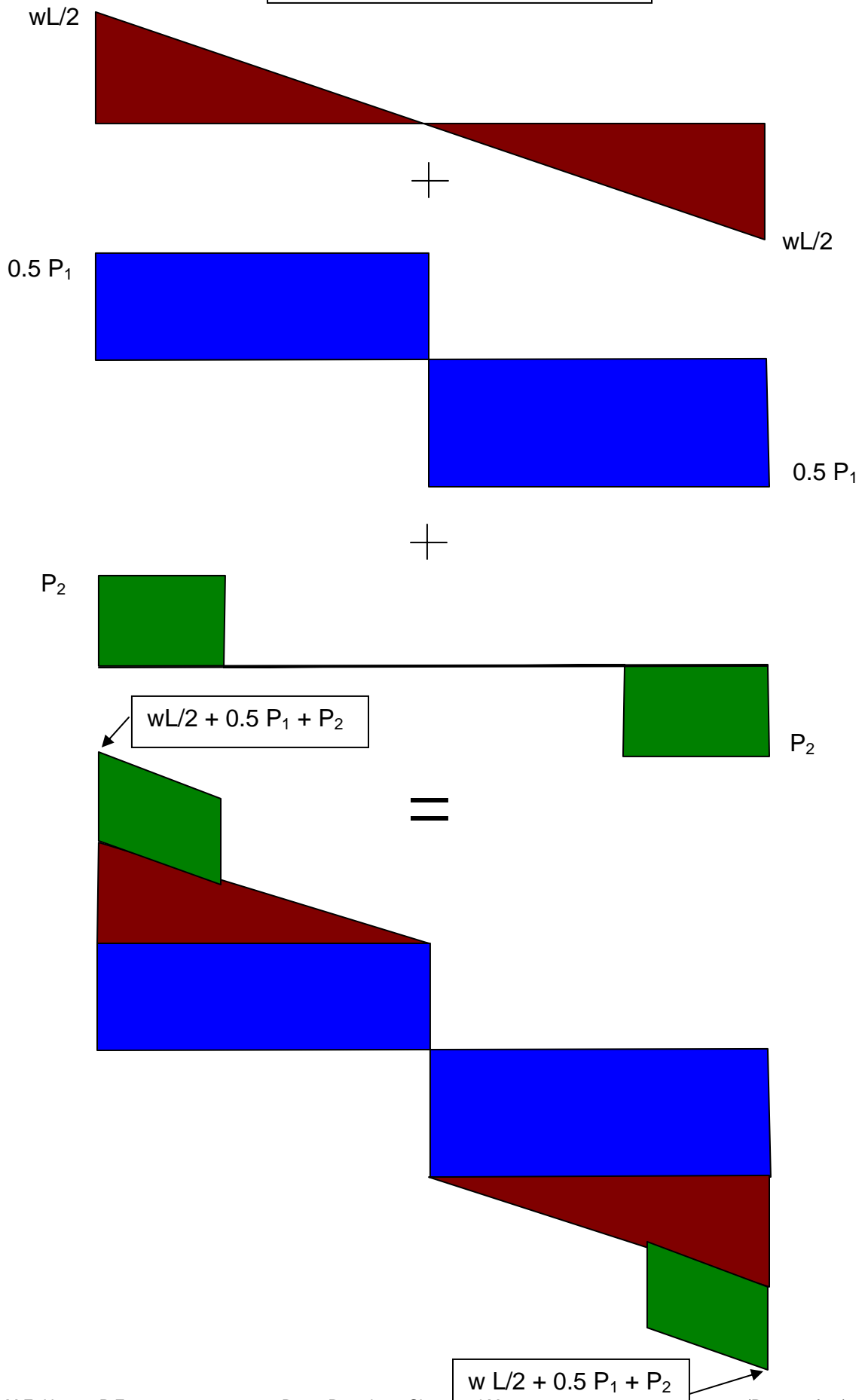


REACTIONS, SHEAR FORCE AND MOMENT DIAGRAMS

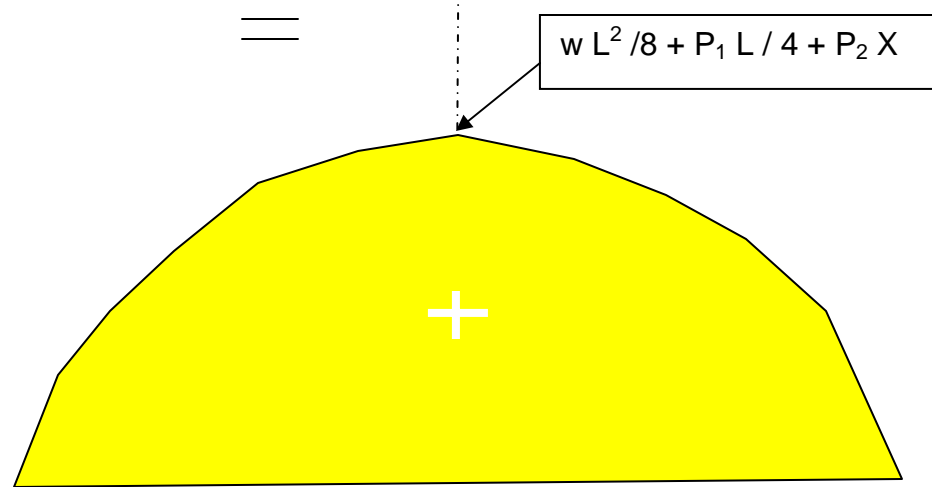
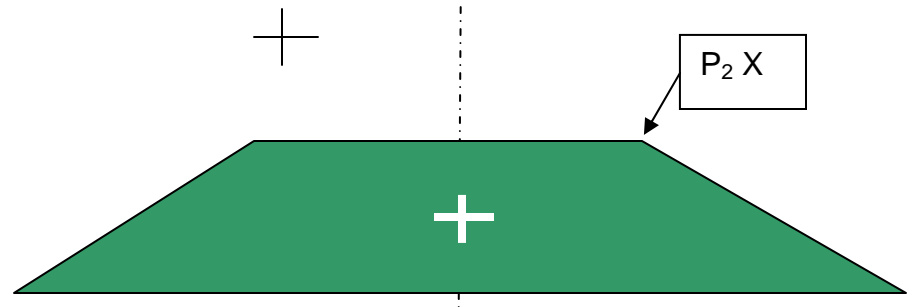
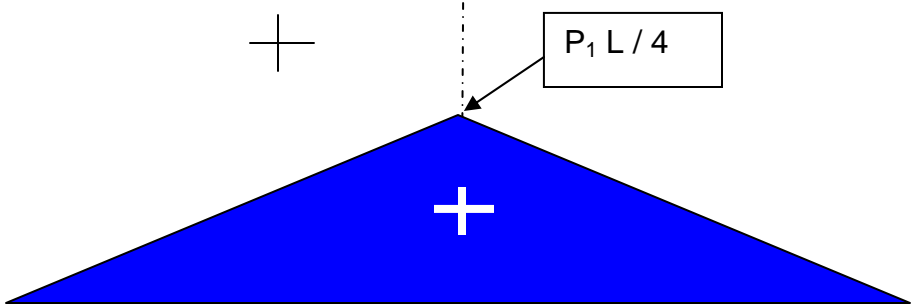
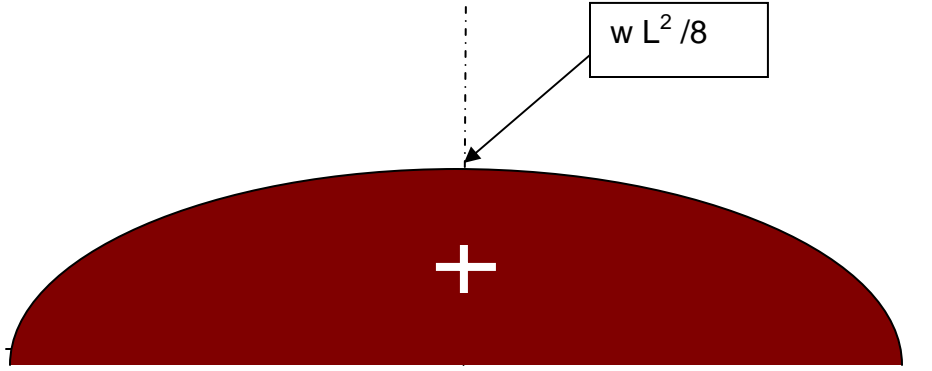
Example 1



SHEAR FORCE DIAGRAMS



MOMENT DIAGRAMS



Example 2

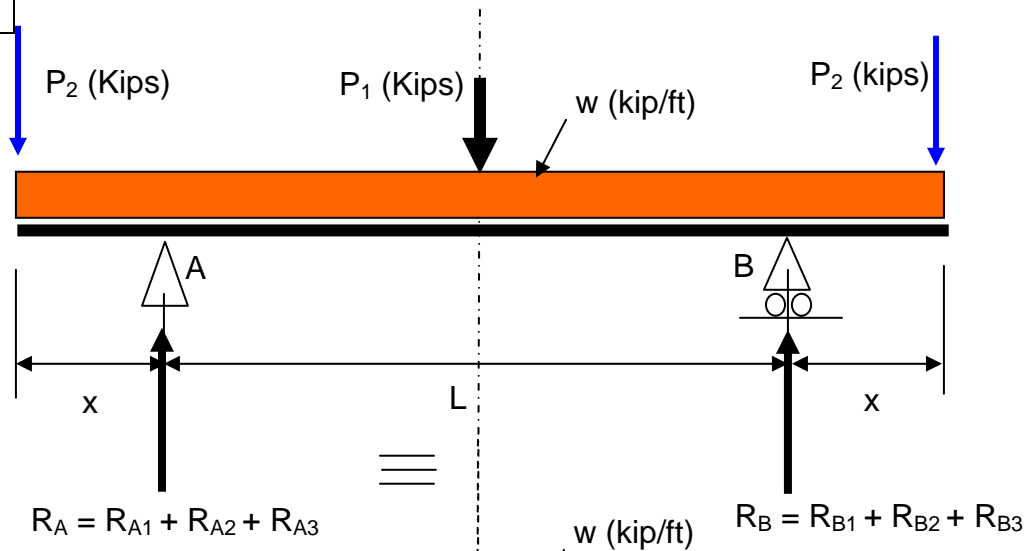


Fig. 1

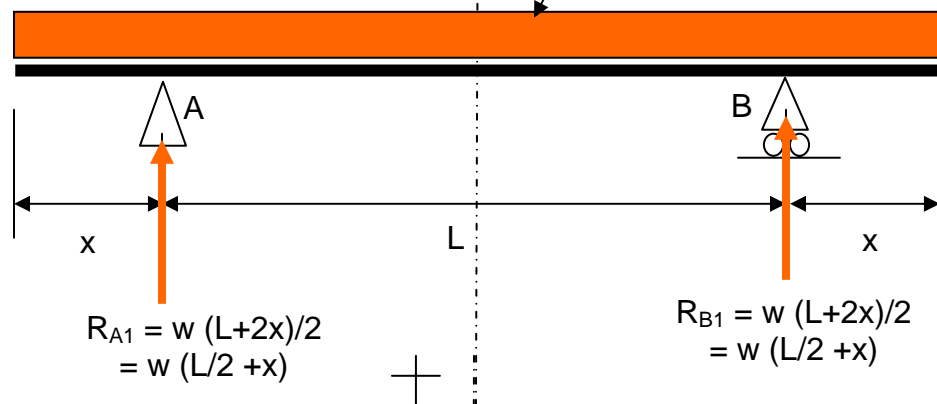


Fig. 2

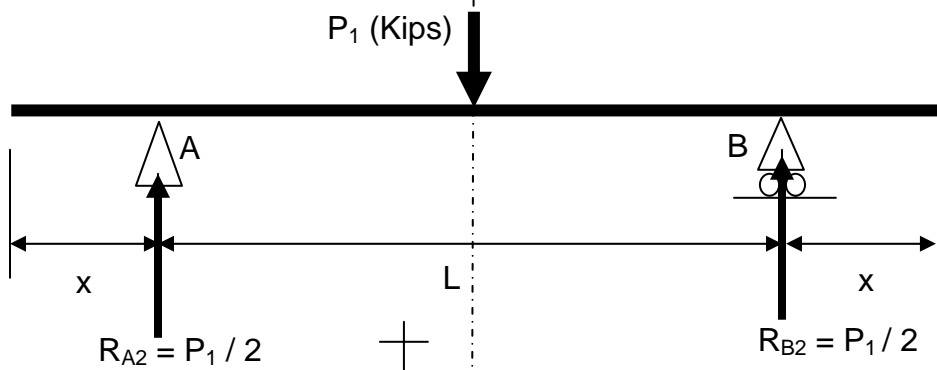
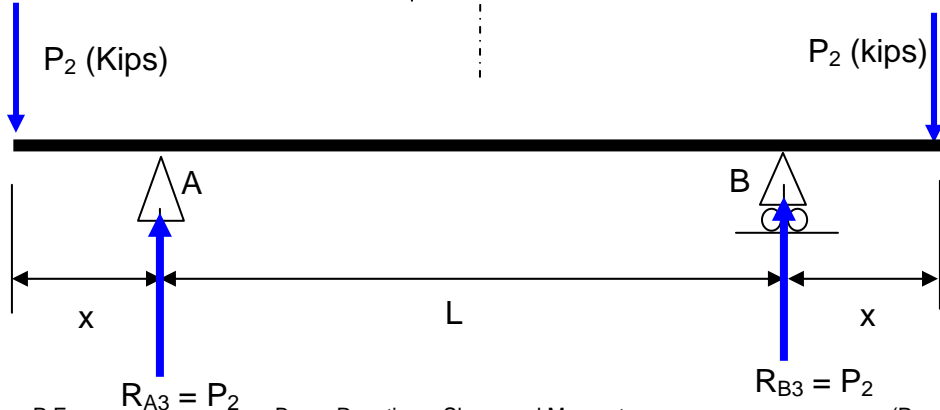
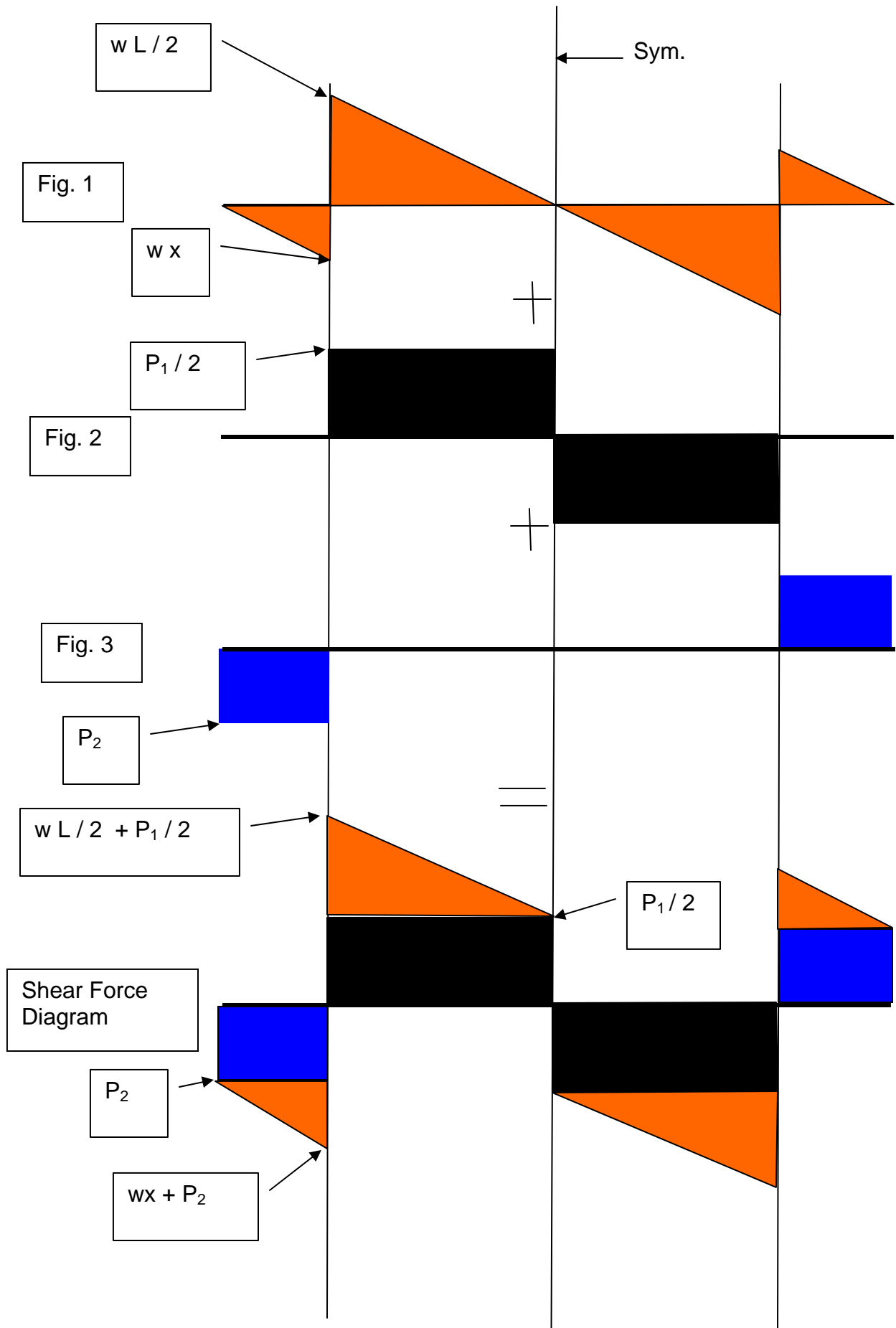
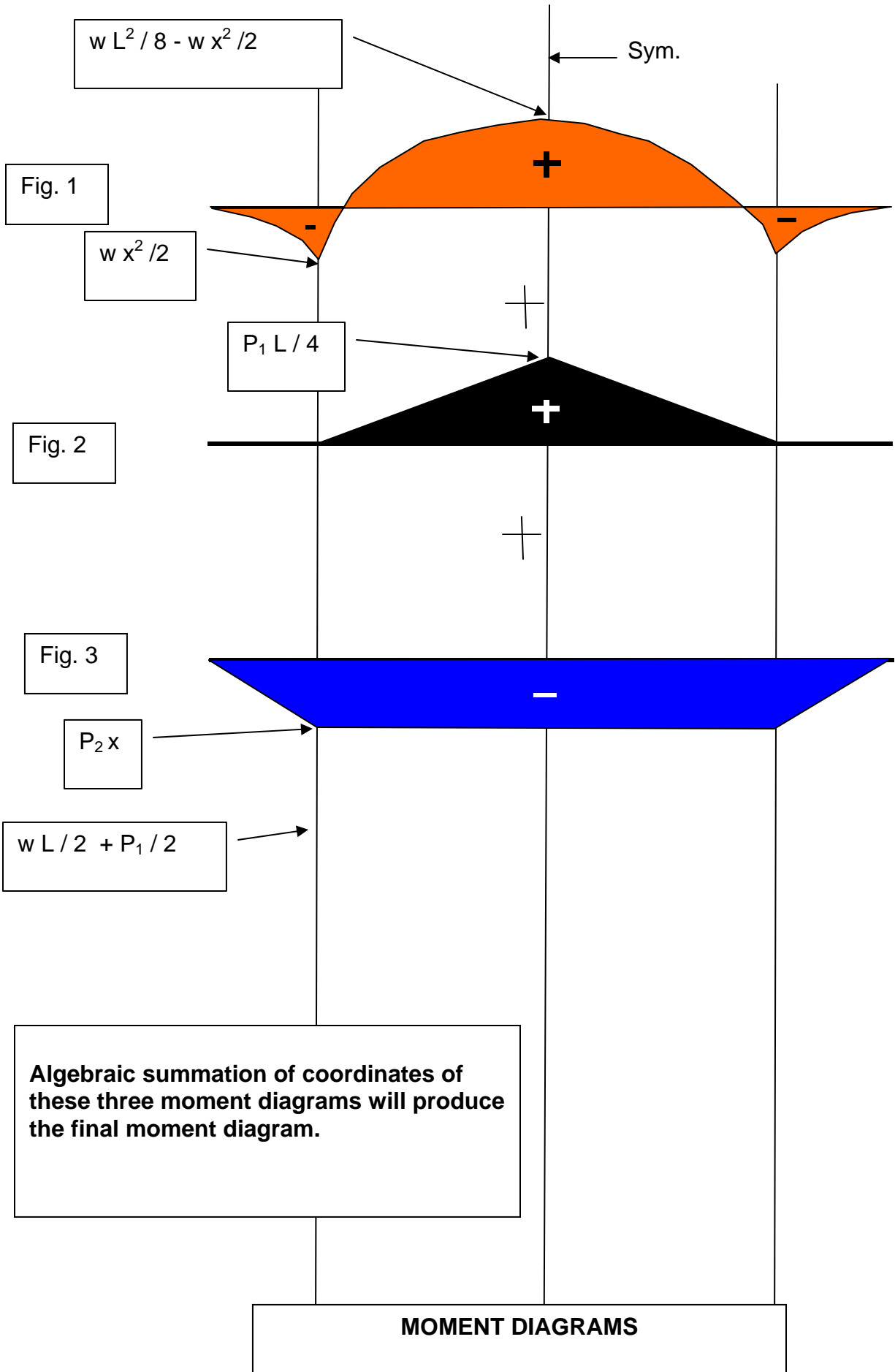


Fig. 3

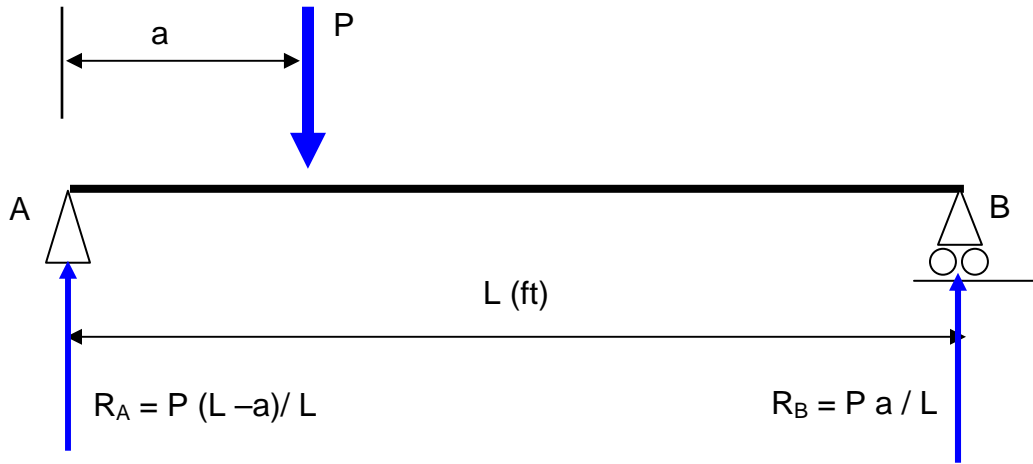




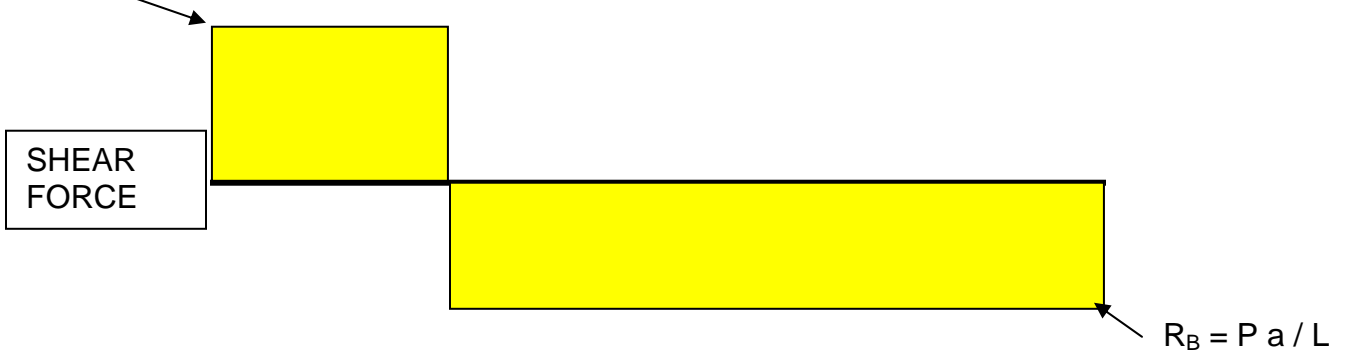
SHEAR FORCE DIAGRAMS



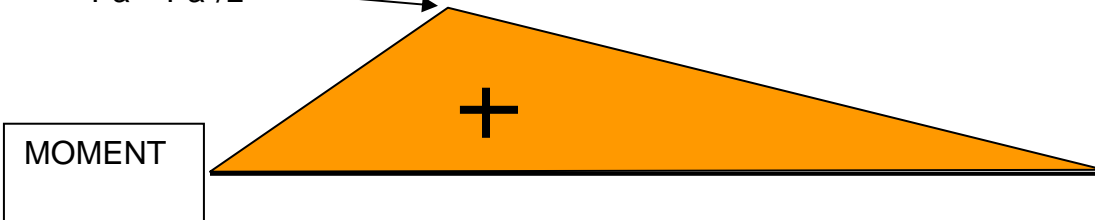
EXAMPLE 3:



$R_A = P(L-a)/L$



$M = Pa(L-a)/L$
 $= Pa - Pa^2/L$



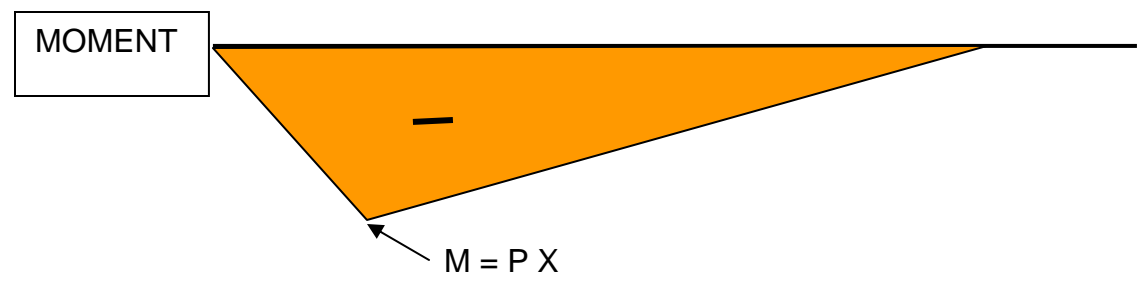
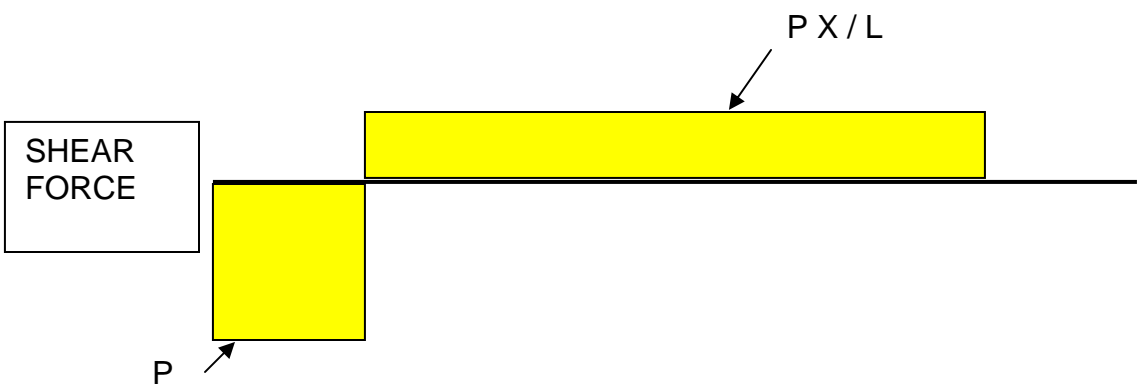
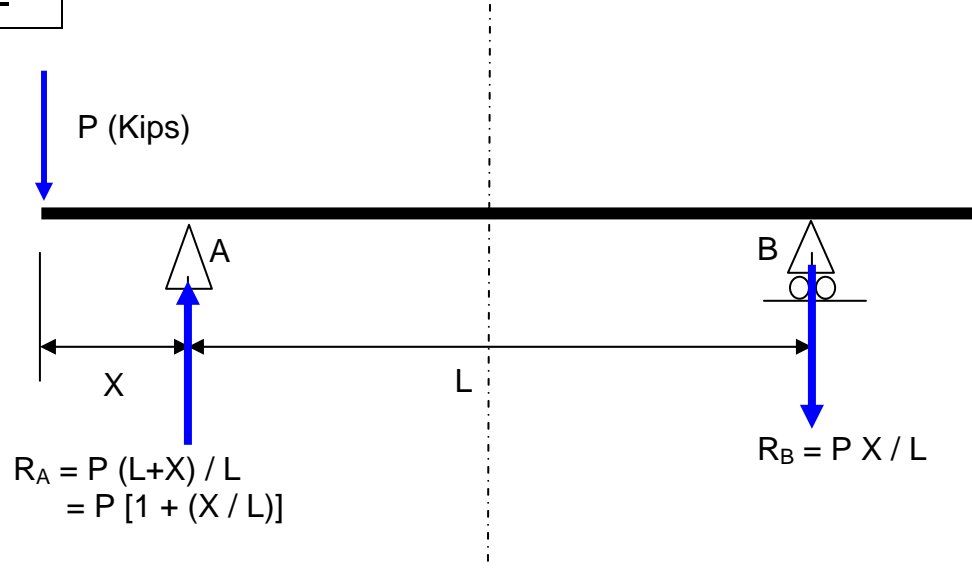
NOTE:

When $a = 0.5L$;

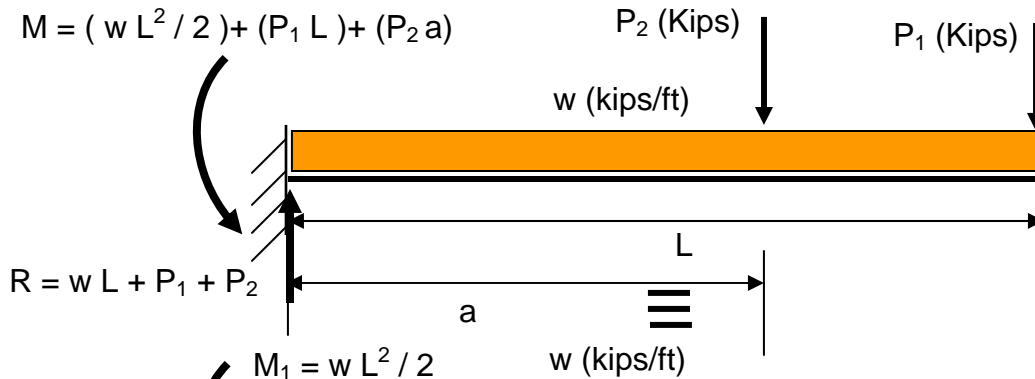
SHEAR FORCE at the mid-span = $P/2$

MOMENT at the mid-span = $PL/4$

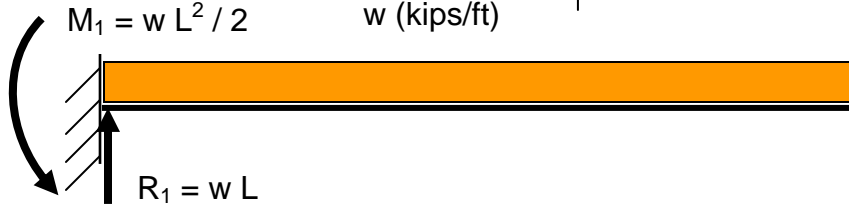
Example 4



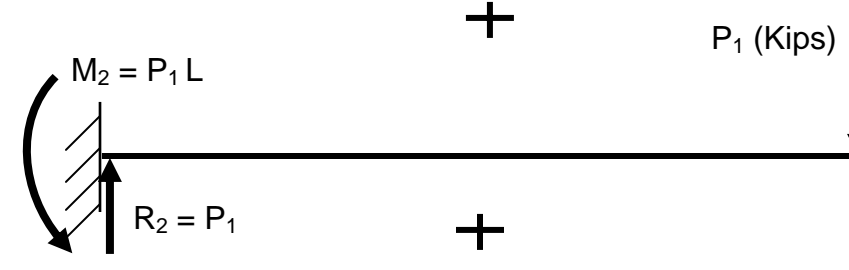
Example 5



**Fig 1.
REACTION
& MOMENT**



**Fig 2.
REACTION
& MOMENT**



**Fig 3.
REACTION
& MOMENT**

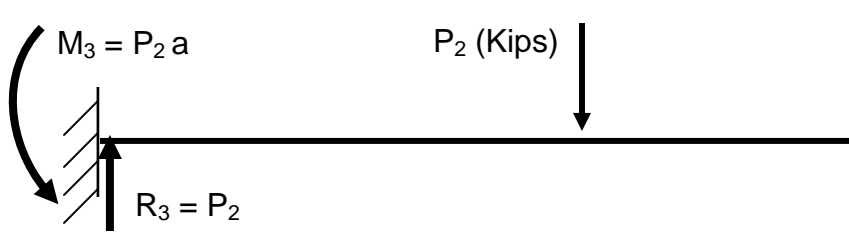


Fig 1.
SHEAR
FORCE

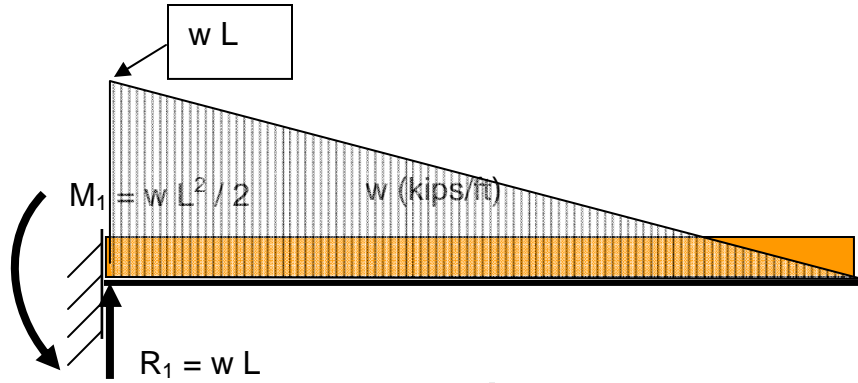


Fig 2.
SHEAR
FORCE

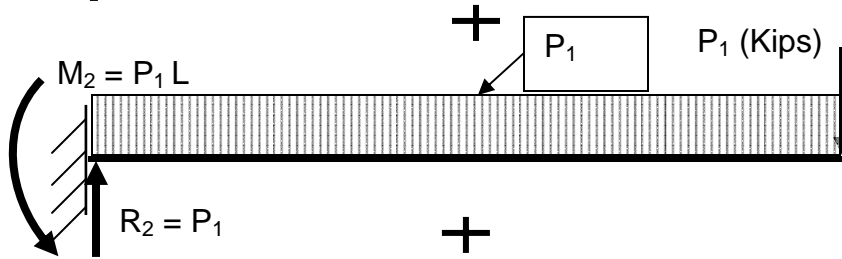
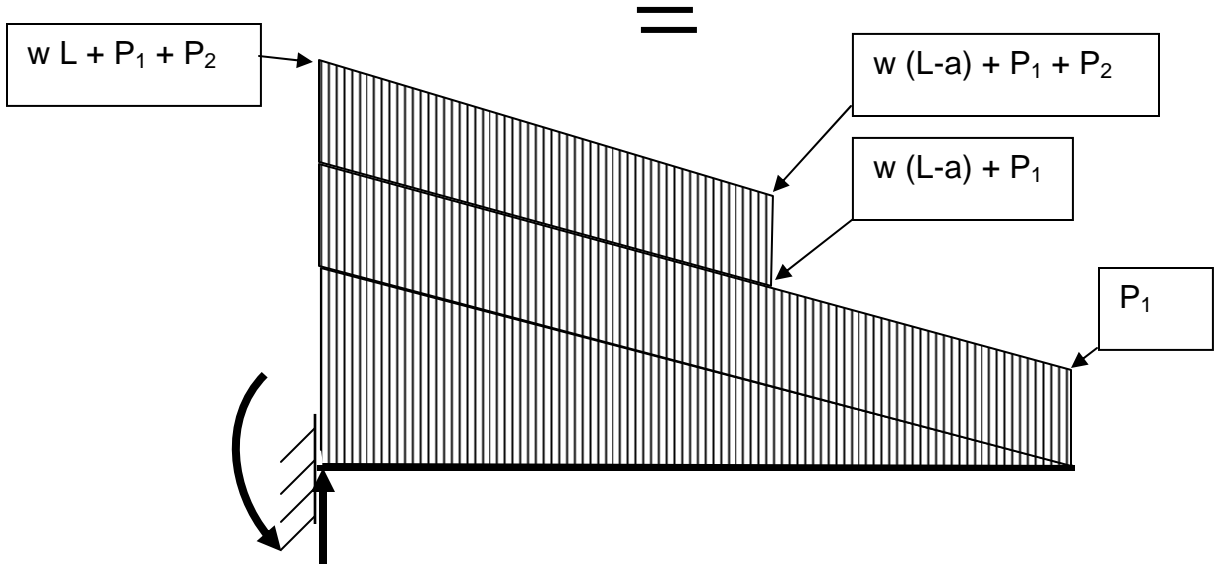
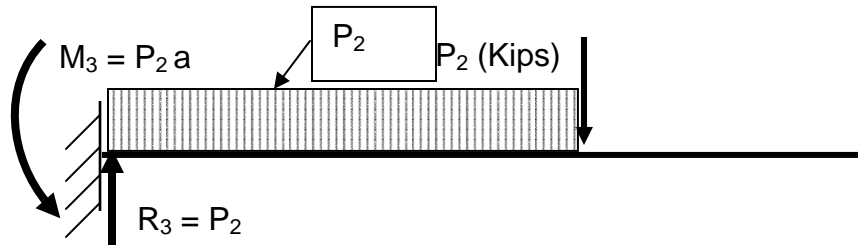


Fig 3.
SHEAR
FORCE



SHEAR FORCE DIAGRAM

Fig 1.
MOMENT

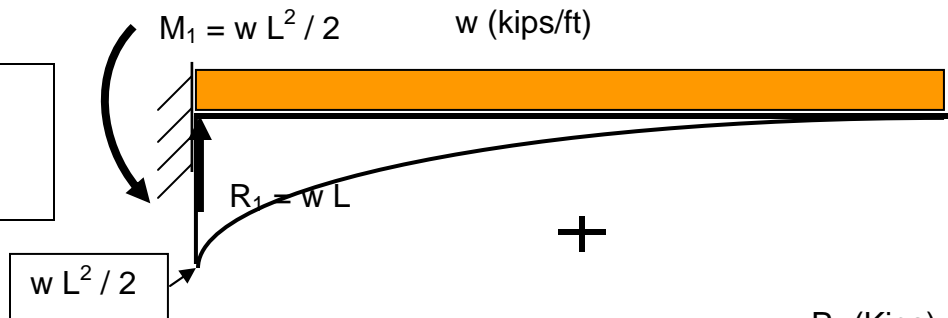


Fig 2.
MOMENT

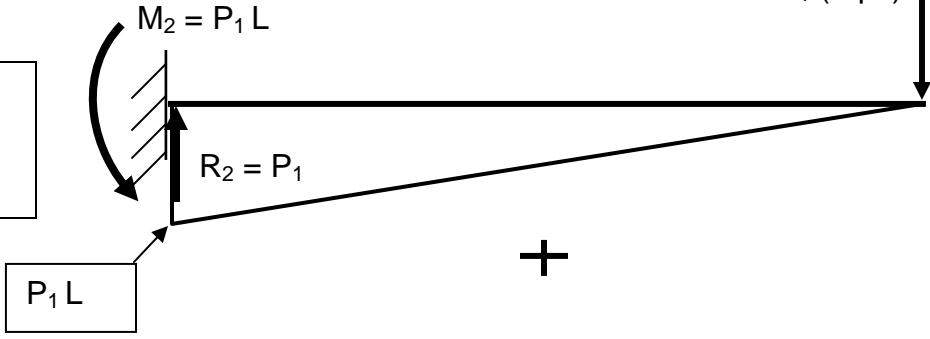
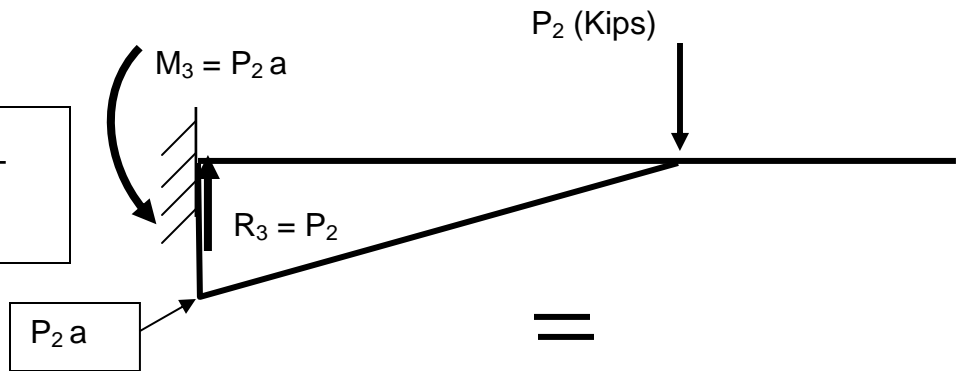


Fig 3.
MOMENT



$[w L^2 / 2] + [P_1 L] + [P_2 a]$

MOMENT DIAGRAM