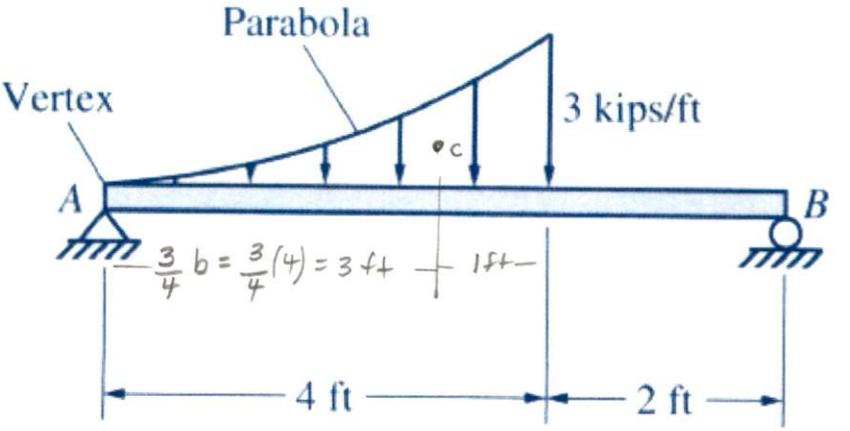
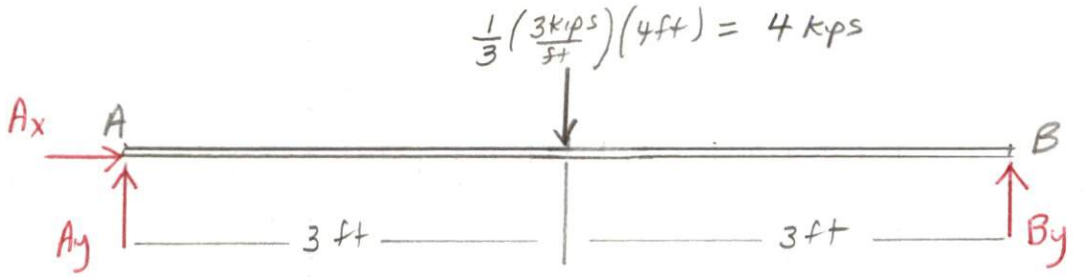
7-25 to 7-28 Refer to Figs. P7-25 to P7-28. Determine the reactions at the supports of the beams for the loading shown in each figure.

7-26.

Solution.





FBD

ccw +M ↻
cw −M ↺

Equilibrium Equations

$[\Sigma F_x = 0] \qquad A_x = 0$

$[\Sigma M_A = 0] \qquad -4kips(3ft) + B_y(6ft) = 0$

$$B_y = \frac{12\,kip.ft}{6ft} = \underline{2\,kips}\uparrow$$

$[\Sigma F_y = 0] \qquad A_y - 4kips + B_y = 0$

$$A_y = 4kips - 2kips = \underline{2\,kips}\uparrow$$