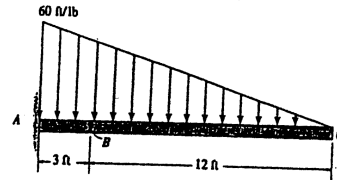


**1-17.** Determine the resultant internal loadings acting on the cross section at point *B*.



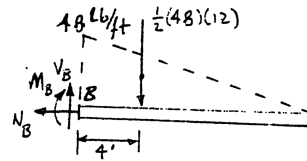
$$\rightarrow \Sigma F_x = 0; \quad N_B = 0 \quad \text{Ans}$$

$$+ \uparrow \Sigma F_y = 0; \quad V_B - \frac{1}{2}(48)(12) = 0$$

$$V_B = 288 \text{ lb} \quad \text{Ans}$$

$$\curvearrowright \Sigma M_B = 0; \quad -M_B - \frac{1}{2}(48)(12)(4) = 0$$

$$M_B = -1152 \text{ lb} \cdot \text{ft} = -1.15 \text{ kip} \cdot \text{ft} \quad \text{Ans}$$



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