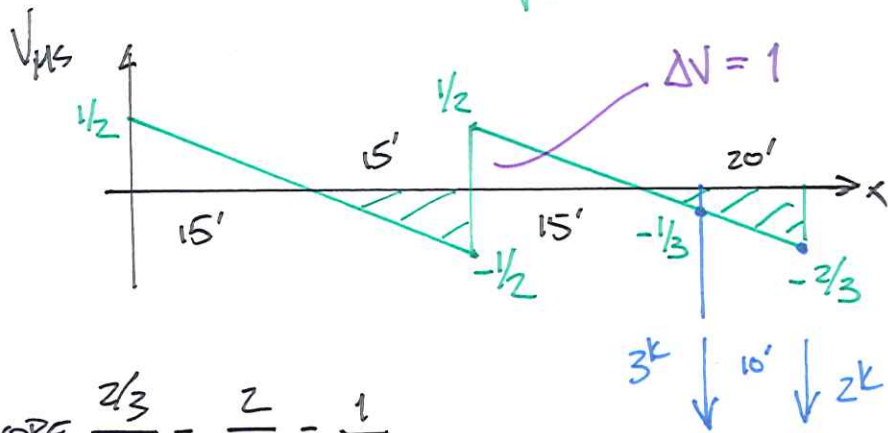
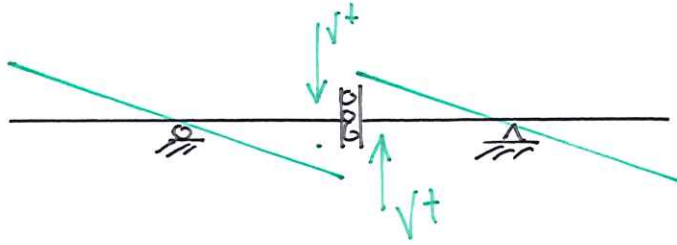
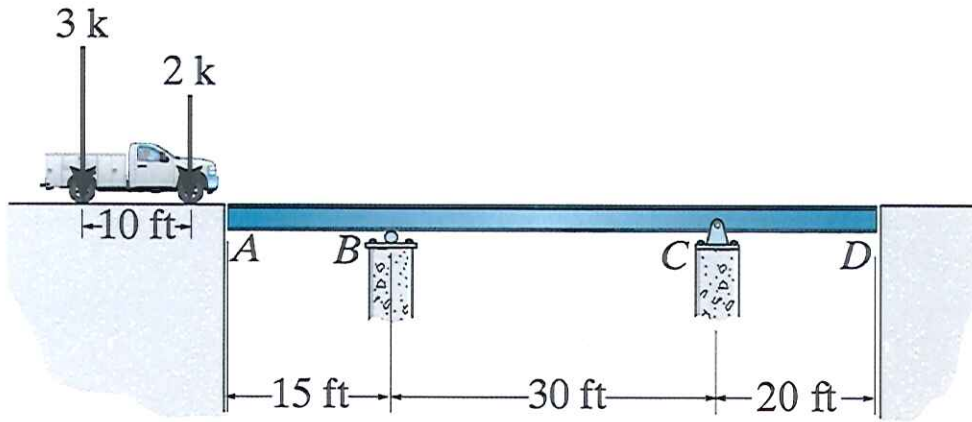


Example 6c-5: Determine the maximum shear created at mid-point BC span in the beam below due to the wheel loads of a moving truck.

NEGATIVE

LIVE UNIFORM $\frac{1}{2} \text{ k/ft}$

$$\frac{1}{2} \text{ k/ft} \left[\frac{1}{2}(15')(-\frac{1}{2}) + \frac{1}{2}(20')(-\frac{2}{3}) \right] = \underline{\underline{-5.2 \text{ k}}}$$



$$\text{SLOPE } \frac{2/3}{20} = \frac{2}{60} = \frac{1}{30}$$

$$\frac{1/2}{15} = \frac{?}{20}$$

$$? = \frac{10}{15} = \frac{2}{3}$$

$$V_{MS}^- = 2 \text{ k}(-\frac{2}{3}) + 3 \text{ k}(-\frac{1}{3}) = \underline{\underline{-2.33 \text{ k}}}$$