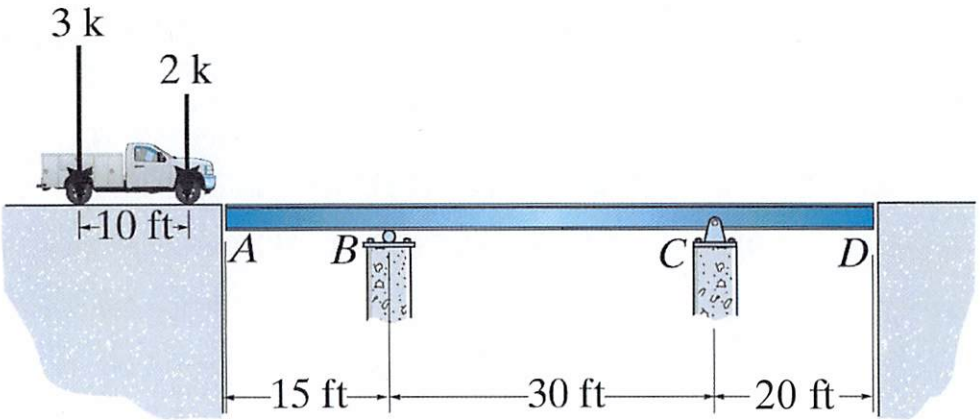
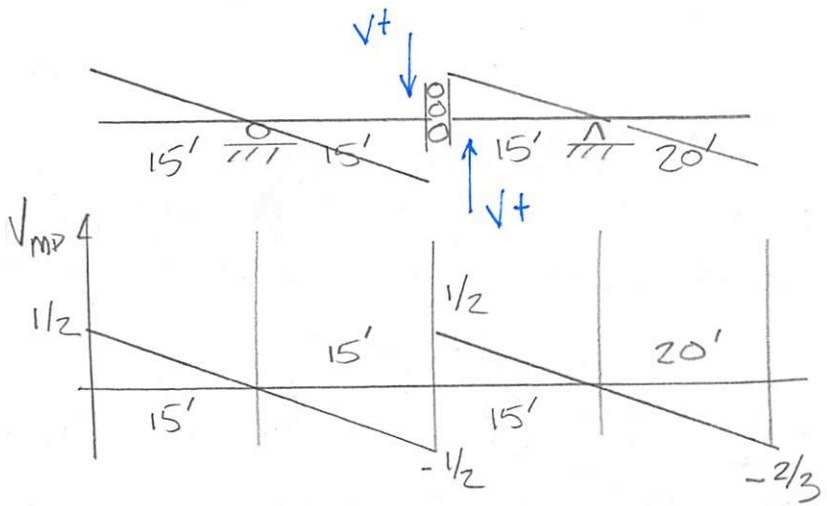
Example 6c-4: Determine the maximum shear created at mid-point *BC* span in the beam below due to the wheel loads of a moving truck.

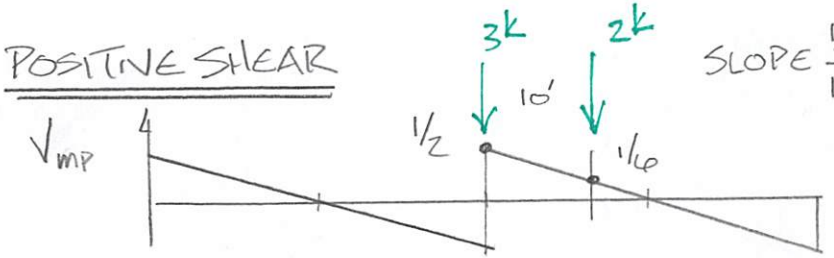




$$\frac{1/2}{15'} = \frac{x}{20}$$

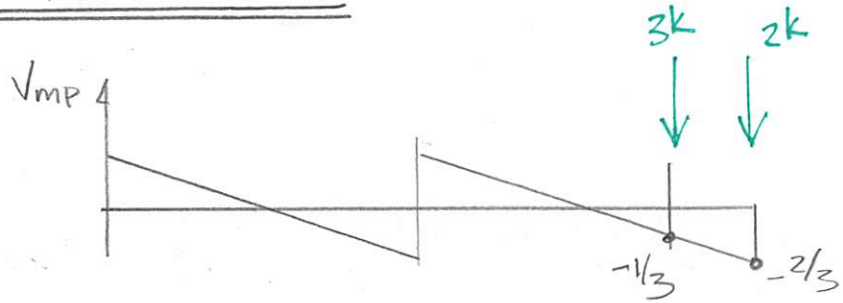
$$x = 2/3$$

POSITIVE SHEAR



$$V_{MP} = 3k(1/2) + 2k(1/6) = \underline{1.83k}$$

NEGATIVE SHEAR



$$V_{MP} = 2k(-2/3) + 3k(-1/3) = \underline{-2.33k}$$

$$V_{MP}{}_{MAX} = -2.33k$$