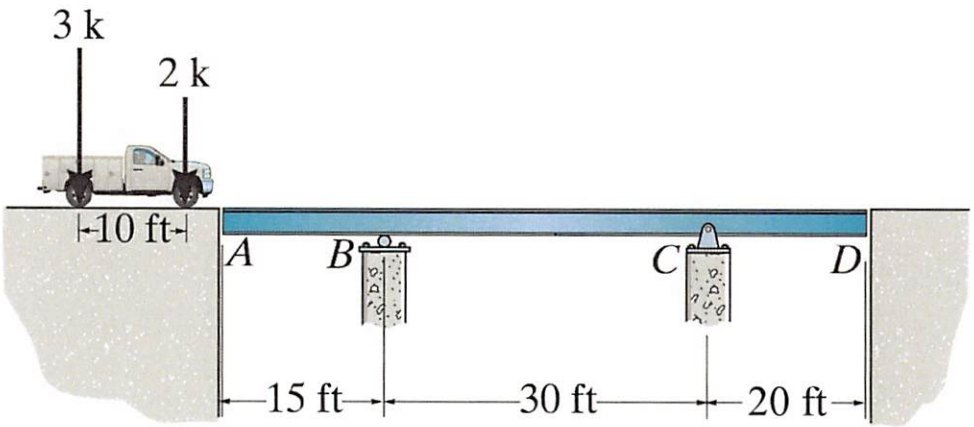
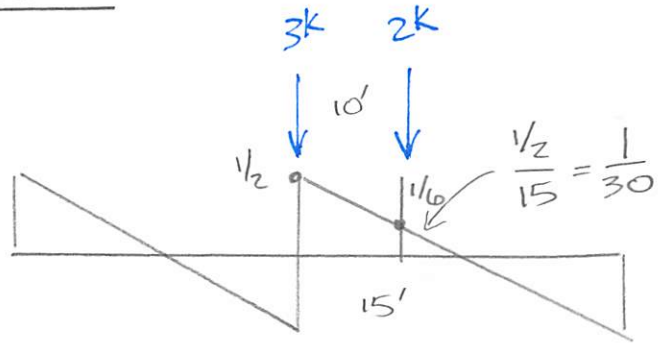
Example 6c-4: Determine the maximum shear created at mid-point *BC* span in the beam below due to the wheel loads of a moving truck.

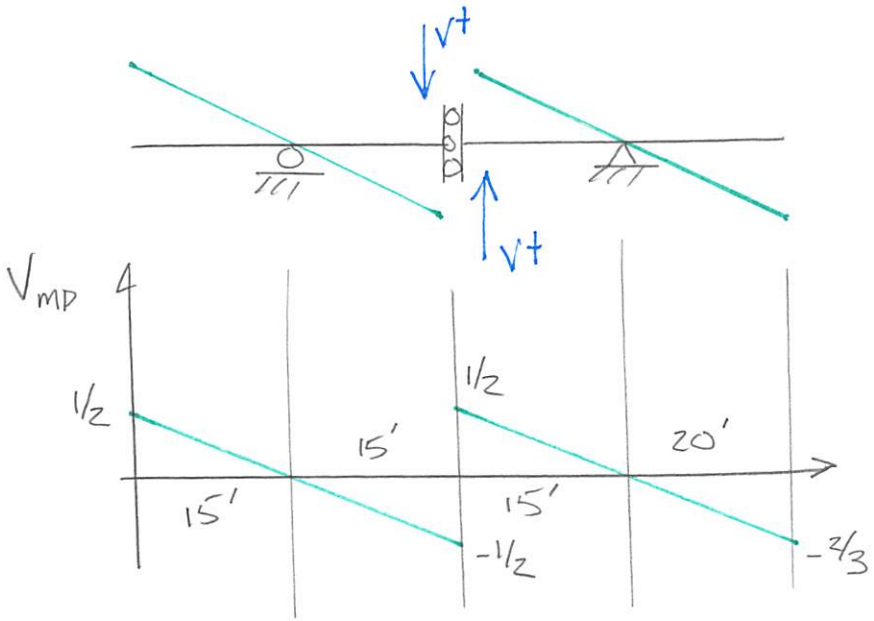


POSITIVE SHEAR

CASE 1

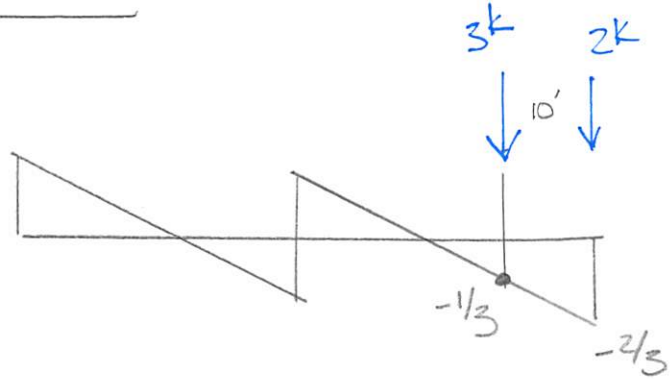


$V_{MP} = 3^k(1/2) + 2^k(1/6) = \underline{1.83^k}$



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

NEGATIVE SHEAR



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

$V_{MP_{MAX}} = -2.33^k$