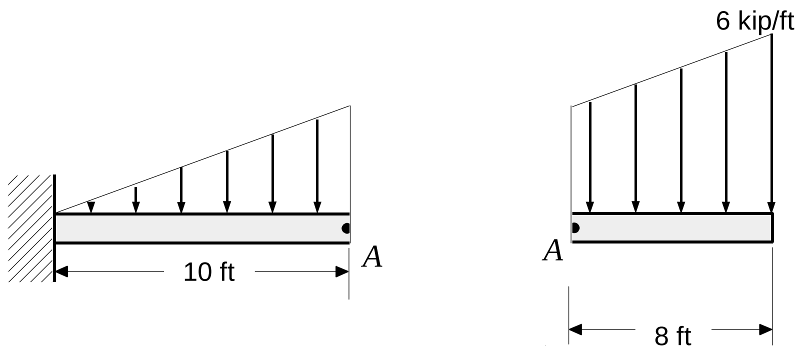
SOLUTION:

Pass an imaginary section, or "cut" through point *A*. Then separate the beam into two parts.



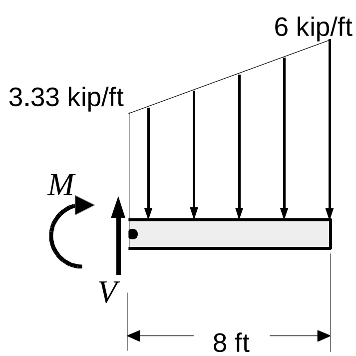
Now choose one of the parts to draw a free body diagram.

We will chose the right part, because if we choose the left part, we will have the fixed support and we will need to calculate the support reactions. Calculating support reactions is extra work you don't need to do if you choose the section on the right.

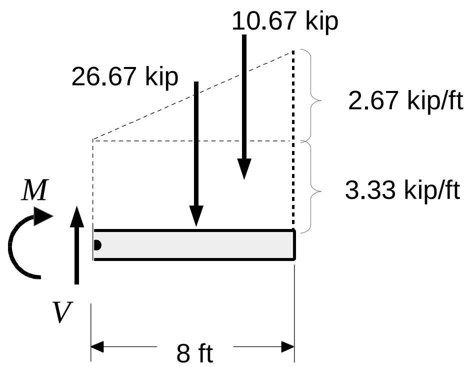
For the section on the right, the distributed load w starts at a non-zero value. Since the distribution is linear, we can figure out its magnitude at any distance x from the fixed support. Using similar triangles:

$$\frac{6\,\text{kip/ft}}{18\,\text{ft}}=\frac{w(x)}{x}$$

Therefore, $w(10\,\text{ft})=3.33\,\text{kip/ft}$. So, here is the FBD for the right section:



We see that a shear force V and a bending moment M keep the section in equilibrium. To proceed, we need to find the equivalent load of the force distribution. This trapezoidal distribution is replaced by a rectangular and a triangular distribution. The equivalent point loads for these is easy to obtain:



So, applying $\sum F_y = 0$ we immediately see that $V = 37.33\,\text{kip}$.