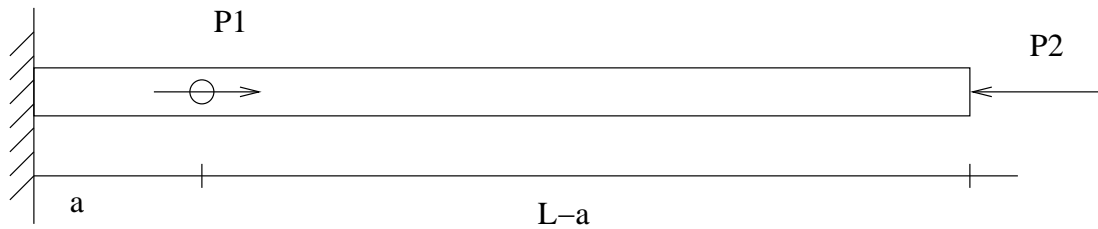
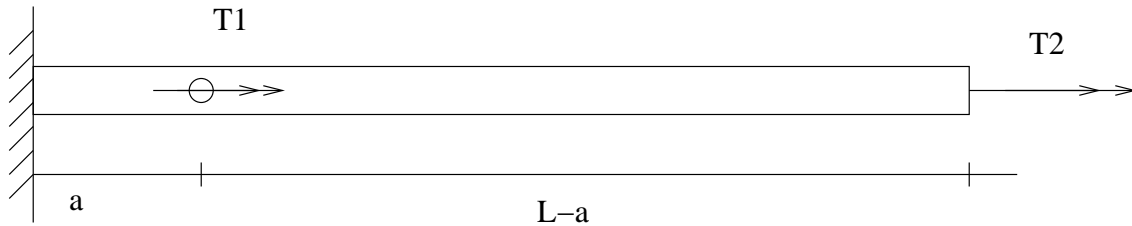


HW 9: Due Wednesday April 21

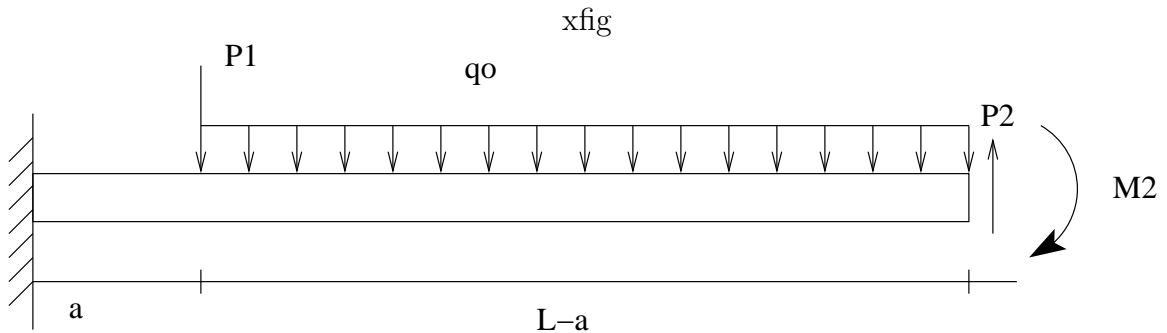
1. Write the virtual work statement for the following system. Make sure to define the solution space \mathcal{S} and the test function space \mathcal{V} .



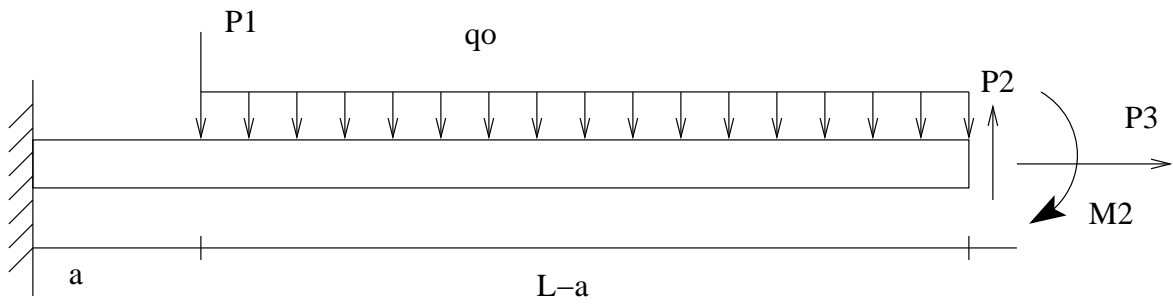
2. Write the virtual work statement for the following system. Make sure to define the solution space \mathcal{S} and the test function space \mathcal{V} .



3. Write the virtual work statement for the following system. Make sure to define the solution space \mathcal{S} and the test function space \mathcal{V} .



4. Write the virtual work statement for the following system. Make sure to define the solution space \mathcal{S} and the test function space \mathcal{V} . Hint: virtual work expressions are additive like real work.



5. For the configuration shown, derive the virtual work equation starting from $(d^2/dx^2)M = q$.

