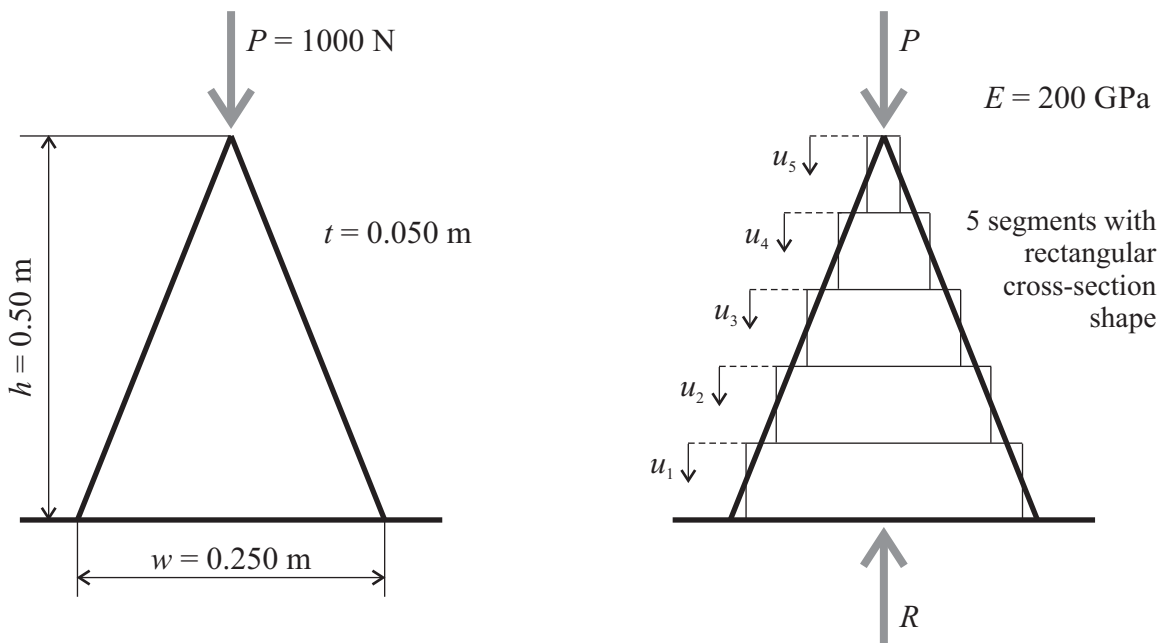


# MAE 3195, Credit Sheet 15

## Introduction to Finite Element Method

Write a Matlab code to solve the following problem. Use the discrete representation shown below:



1. Determine displacements  $u_1, u_2, \dots, u_5$
2. Determine reaction force,  $R$
3. Determine strain  $\varepsilon_i$  in each segment
4. Determine stress  $\sigma_i$  in each segment.