

Homework 3, 03/22/2019 Due: 03/27/2019

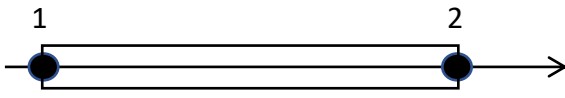
A4 professional format, collecting at the BEGINNING of class (09:09 am)

(late submission within 24 hours: score*0.9; late submission before post of solution: score*0.8

(the solution will be posted usually within a week)

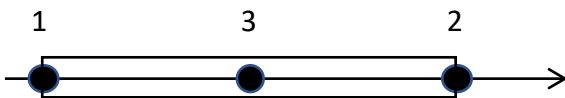
Total 40%

1. (40%) Consider a two-node linear element and a three-node element shown below with a constant cross-sectional area A^e and a sine distribution of body forces $b(x) = 2\sin\left(\frac{\pi}{L}x\right)$ for the linear and quadratic elements, respectively.



$x = 0$

$x = L$



$x = 0$

$x = \frac{L}{2}$

$x = L$