

ID No.

Name:

Date:

Quiz FEM1

Problem A) If the length of the member shown in Figure 1 decreased by 25 mm after applying force N :

- (1) Determine the engineering and true strain in the longitudinal direction
- (2) Determine the new thickness of the member after loading assuming Poisson's Ratio (ν) of 0.3

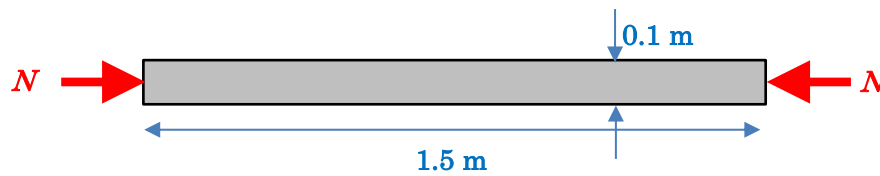


Figure 1

Problem B) Determine the shear strain for the condition shown in Figure 2.

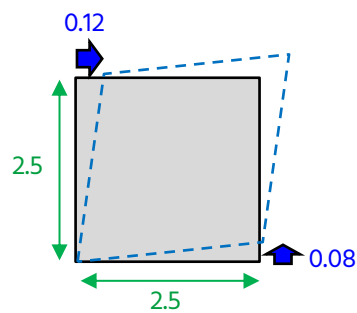


Figure 2