

Please show your work and draw a box around your answer to receive full credit.

- 1) Use MATLAB and write an M-file to evaluate the stiffness matrix for the element shown in Figure 1 using isoparametric formulation. Let $E = 30 \times 10^6$ psi and $\nu = 0.25$. Assume a thickness of 1 in.

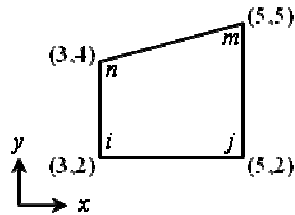


Figure 1. Quadrilateral element