Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Home assignment 3**

Consider the membrane of polygonal shape of the figure for which density , thickness , tightening  (force per unit length) are constants. Using the given displacement values at the grid points on the boundary, determine the unknown transverse displacement values ,  and  using the given Laplacian stencil for the interior points given by the Finite Element Method and bi-linear approximation on rectangle elements.



























































