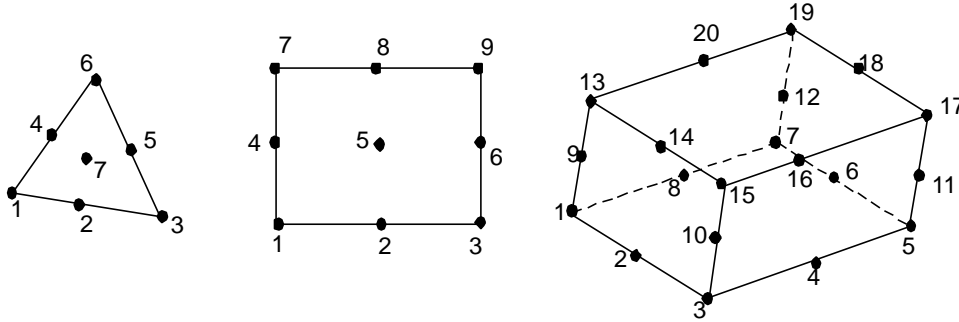


Home work 2
Design Using FEM (EML 4536/5537)
Due on 09-10-03

1. What is the fundamental concept of FEM?
2. Write a displacement function for the elements shown below (use Pascal triangle/prism for help).



3. Explain the principle of virtual work with an example.
4. What does a column in an element stiffness matrix represent physically?
5. Explain the characteristic features of a global stiffness matrix.
6. Explain briefly various steps in a finite element analysis. Show relevant mathematical equations in each step.