

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

### Assignment 5

The bar truss shown in loaded by vertical force  $F$  at node 2. If bar 2 is inextensible, determine the non-zero displacements of the nodes. The cross-sectional area of bar 1 and 3 is  $A$  and that of bar 2 is  $\sqrt{2}A$ . Young's modulus  $E$  of the material is constant. Use the principle of virtual work.

