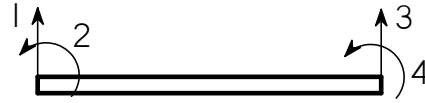


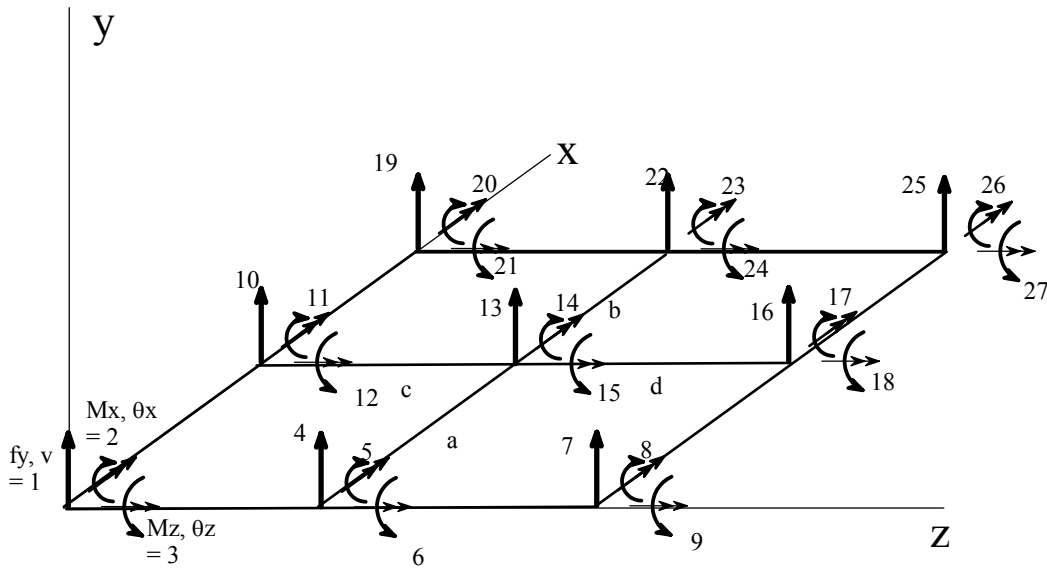
Grillage Overview/Introduction

degrees of freedom:

flex only beam

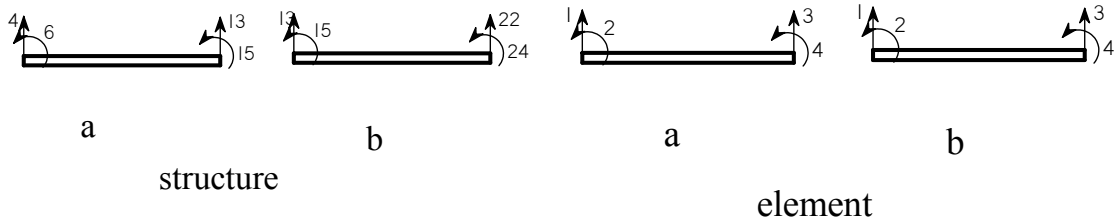


we will divert to smartsketch to develop the structure for application of matrix analysis



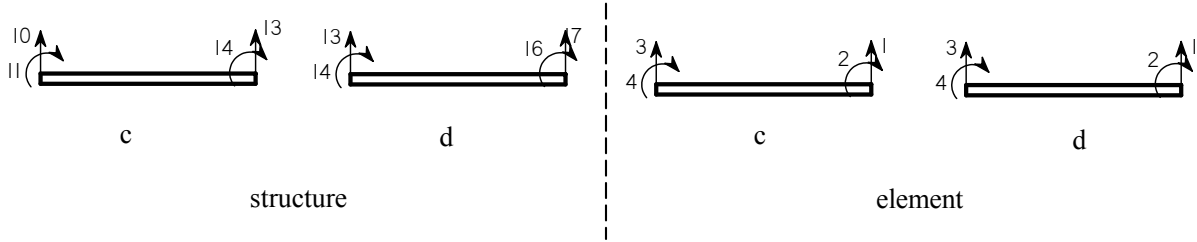
looking at elements a and b (in x direction) and c and d (in z direction)

using results from smartsketch



initial topology matrix for a and b would be:

elements a & b $\left(\begin{array}{ccc} & & \\ & & \\ & & \end{array} \right)$ $\left(\begin{array}{ccc} & & \\ & & \\ & & \end{array} \right)$



elements c & d $\left(\begin{array}{ccc} & & \\ & & \\ & & \end{array} \right)$ $\left(\begin{array}{ccc} & & \\ & & \\ & & \end{array} \right)$

the remainder of the analysis follows matrix analysis.

let's do example

convert distributed load to equivalent static

