

Exercise

Calculate displacements and torsion of a 2-nodes single element. The first node is restricted and loads of $f(7)=3000$; $f(8)=500$; $f(9)=300$; $f(10)=500$; $f(11)=300$; $f(12)=400$ are applied to the second node.

Please also consider:

$E=30e6$; $A=6.8$; $I_z=65$; $I_y=45$; $G=80e6$; $J=50$.

$d=[1.47e-5$
 $1.88e-7$
 $5.29e-9$
 $1.25e-7$
 $4.76e-8$
 $3.33e-7]$