

Inputs to GEBT

```
0 99 2
3 2 3 2 0 0 0 0 0
1 0 0 0
2 1000 0 0
3 1000 153 0
```

```
1 1 2 1 1 0 1 0
2 2 3 2 2 0 1 0
```

```
1
1 2 3 4 5 6
0 0 0 0 0 0
0 0 0 0 0 0
0 0 0 0 0 0
```

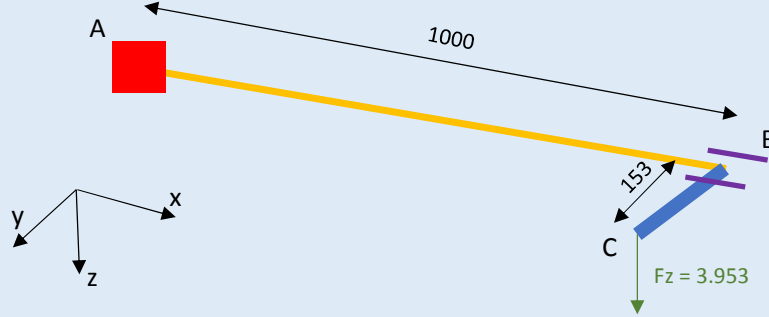
Fully fixed

```
2
2 3 5 6 7 10
0 0 0 0 0 0
0 0 0 0 0 0
0 0 0 0 0 0
```

Free to translate rotate upon X, Other degrees of freedom are fixed

```
3
7 8 9 10 11 12
0 0 3.953 0 0 0
0 0 0 0 0 0
0 0 0 0 0 0
```

Applies force upon Z



Material of the main beam

```
1
4.8449054736E-07 0.0000000000E+00 0.0000000000E+00 0.0000000000E+00 -4.3110706619E-21 -2.4692573741E-21
0.0000000000E+00 2.5263777469E-06 1.4286014939E-19 -7.3456086797E-23 0.0000000000E+00 0.0000000000E+00
0.0000000000E+00 1.4286014939E-19 2.5263777469E-06 2.8483461550E-22 0.0000000000E+00 0.0000000000E+00
0.0000000000E+00 -7.3456086797E-23 2.8483461550E-22 6.2865682450E-08 0.0000000000E+00 0.0000000000E+00
-4.3110706619E-21 0.0000000000E+00 0.0000000000E+00 0.0000000000E+00 4.7267364444E-08 -3.7986492167E-22
-2.4692573741E-21 0.0000000000E+00 0.0000000000E+00 0.0000000000E+00 -3.7986492167E-22 4.7267364444E-08
```

Much stiffer material for the lever arm

```
2
9.0383770549E-008 0.0000000000E+00 0.0000000000E+00 0.0000000000E+00 -2.8065456918E-023 1.8861581857E-022
0.0000000000E+00 2.7656430909E-007 1.4032732695E-021 -5.2660892595E-024 0.0000000000E+00 0.0000000000E+00
0.0000000000E+00 1.4032732695E-021 2.7656430909E-007 -1.1394933346E-023 0.0000000000E+00 0.0000000000E+00
0.0000000000E+00 -5.2660892595E-024 -1.1394933346E-023 2.3198208184E-008 0.0000000000E+00 0.0000000000E+00
-2.8065456918E-023 0.0000000000E+00 0.0000000000E+00 0.0000000000E+00 1.7844772331E-008 -1.4363222275E-023
1.8861581857E-022 0.0000000000E+00 0.0000000000E+00 0.0000000000E+00 -1.4363222275E-023 1.7844772331E-008
```

Outputs from GEBT

```
Step #      2
Point #:    1
-----
0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
-4.6775451E-19 0.0000000E+00 0.0000000E+00 2.0431924E-16 0.0000000E+00 0.0000000E+00
Point #:    2
-----
1.0000000E+03 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
-2.2663264E-22 0.0000000E+00 0.0000000E+00 1.2844669E-20 0.0000000E+00 0.0000000E+00
0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
Point #:    3
-----
1.0000000E+03 1.5300000E+02 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
-1.3083638E-05 5.1887139E-17 6.3228718E-02 5.9588641E-21 -8.2563990E-04 6.6455851E-19
0.0000000E+00 0.0000000E+00 3.9530000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
Member #:    1
-----
5.0000000E+02 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
-1.1331132E-22 0.0000000E+00 0.0000000E+00 6.4223344E-21 0.0000000E+00 0.0000000E+00
-4.6775451E-19 0.0000000E+00 0.0000000E+00 2.0431924E-16 0.0000000E+00 0.0000000E+00
Member #:    2
-----
1.0000000E+03 7.6500000E+01 0.0000000E+00 0.0000000E+00 0.0000000E+00 0.0000000E+00
-6.5418192E-06 2.5843570E-17 3.1664359E-02 9.4017664E-21 -4.1281995E-04 3.3227926E-19
1.6318772E-03 3.7436301E-20 3.9529997E+00 1.6774799E-18 -3.0240447E+02 2.8638770E-18
```

Why not force Balance
Why the resulting moment in A does not match the applies Force * Lever Arm Length