1 1 1 -24.0 0.0 0.0 -23.0 7.5 3 0.0 0.22.0 15.0 4 0.0 0.0 -22.0 15.0 4 0.0 0.0 -21.0 22.5 5 0.0 0.0 -20.0 30.0 6 0.0 0.0 -19.0 37.5 5 5 0.0 0.0 -19.0 37.5 5 0.0 0.0 -19.0 37.5 5 0.0 0.0 -19.0 37.5 5 0.0 0.0 -19.0 37.5 5 0.0 0.0 -19.0 37.5 25.5 9 0.0 0.0 -17.0 52.5 9 0.0 0.0 -15.0 667.5 11 0.0 0.0 -15.0 667.5 11 0.0 0.0 -13.0 82.5 11 0.0 0.0 -13.0 82.5 11 0.0 0.0 -13.0 82.5 11 0.0 0.0 0.0 0.0 11.0 97.5 12 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	! nodes list : ! node nr boundary *NODES	conditions	codes:	x,y,theta	a	x	у
3 0 0 0 0 -22.0 15.0 4 0 0 0 -21.0 22.5 5 0 0 0 -20.0 30.0 6 0 0 0 -19.0 37.5 7 0 0 0 -18.0 45.0 8 0 0 0 -17.0 52.5 9 0 0 0 -15.0 67.5 11 0 0 0 -14.0 75.0 12 0 0 0 -13.0 82.5 13 0 0 0 -11.0 97.5 15 0 0 0 -11.0 97.5 16 0 0 0 -11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 15.0 67.5 21 0 0 0 17.0 90.0 18 0 0 0 17.0 90.0 22 0 0 0 12.0 90.0 23 0 0 0 12.0 90.0 24 0 0 0 15.0 67.5 25 0 0 0 15.0 67.5 26 0 0 0 17.0 52.5 27 0 0 0 20.0 30.0 26 0 0 0 19.0 37.5 29 1 1 1 24.0 0.0 30 0 0 0 22.0 15.0 31 0 0 0 9 20.0 30.0 <td>1</td> <td></td> <td>1 1</td> <td>1</td> <td>-24.</td> <td>0</td> <td>0.0</td>	1		1 1	1	-24.	0	0.0
4 0 0 0 0 -21.0 22.5 5 0 0 0 -20.0 30.0 6 0 0 0 -19.0 37.5 7 0 0 0 -18.0 45.0 8 0 0 0 -17.0 52.5 9 0 0 0 -16.0 60.0 10 0 0 0 -15.0 67.5 11 0 0 0 -14.0 75.0 12 0 0 0 -13.0 82.5 13 0 0 0 -12.0 90.0 14 0 0 0 -11.0 97.5 15 0 0 0 0 0.0 90.0 16 0 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 15.0 67.5 21 0 0 0 15.0 67.5 21 0 0 0 14.0 75.0 22 0 0 0 15.0 67.5 21 0 0 0 15.0 67.5 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 21.0 20.0 30.0 26 0 0 0 21.0 20.0 30.0 27 0 0 0 22.0 30.0 37.5 28 0 0 0 21.0 30.0 30.0 31 0 0 0 22.0 30.0 37.5 29					-23.	0	7.5
5 0 0 0 0 -20.0 30.0 6 0 0 0 0 -19.0 37.5 7 0 0 0 -18.0 45.0 8 0 0 0 -17.0 52.5 9 0 0 0 -16.0 60.0 10 0 0 0 -15.0 67.5 11 0 0 0 -14.0 75.0 12 0 0 0 -12.0 90.0 14 0 0 0 -11.0 97.5 15 0 0 0 0 -11.0 97.5 16 0 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 12.0 90.0 18 0 0 0 15.0 67.5 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 30 0 0 0 22.0 15.0 31 0 0 0 22.0 15.0 32							15.0
6 0 0 0 0 -19.0 37.5 7 0 0 0 0 -18.0 45.0 8 0 0 0 -17.0 52.5 9 0 0 0 -16.0 60.0 10 0 0 0 -15.0 67.5 11 0 0 0 -14.0 75.0 12 0 0 0 -13.0 82.5 13 0 0 0 -11.0 99.0 14 0 0 0 -11.0 97.5 15 0 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 14.0 75.0 21 0 0 0 14.0 97.5 21 0 0 0 17.0 90.0 18 0 0 0 17.0 90.0 18 0 0 0 17.0 90.0 22 0 0 0 14.0 75.0 22 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 33.0 7.5 29 1 1 1 2 24.0 0.0 30 0 0 0 22.0 15.0 31 0 0 0 9 20.0 33.0 30.0 32 0 0							
7 0 0 0 0 -18.0 45.0 8 0 0 0 -17.0 52.5 9 0 0 0 -16.0 60.0 10 0 0 0 -15.0 67.5 11 0 0 0 -14.0 75.0 12 0 0 0 -12.0 90.0 13 0 0 0 -11.0 97.5 15 0 0 0 0 -11.0 97.5 15 0 0 0 0 0 11.0 97.5 16 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 14.0 75.0 20 0 0 14.0 75.0 21 0 0 0 15.0 67.5 21 0 0 0 14.0 75.0 22 0 0 0 17.0 52.5 23 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 23.0 75.5 29 1 1 1 24.0 6.0 30 0 0 0 23.0 75.5 29 1 1 1 24.0 6.0 30 0 0 0 23.0 75.5 31 0 0 0 9.0 37.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5					-20.	0	30.0
8 0 0 0 0 -17.0 60.0 10 0 0 0 0 -16.0 60.0 10 0 0 0 0 -15.0 67.5 11 0 0 0 0 -14.0 75.0 12 0 0 0 0 -12.0 90.0 13 0 0 0 -12.0 90.0 14 0 0 0 -11.0 97.5 15 0 0 0 0 0.0 90.0 16 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 30.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 9.0 37.5 31 0 0 0 9.0 37.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
9 0 0 0 0 -16.0 60.0 10 0 0 0 -15.0 67.5 11 0 0 0 -14.0 75.0 12 0 0 0 -12.0 90.0 13 0 0 0 -12.0 90.0 14 0 0 0 -11.0 97.5 15 0 0 0 0 -11.0 97.5 16 0 0 0 11.0 97.5 17 0 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 21.0 22.5 29 1 1 1 24.0 0.0 30 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 9.0 37.5 32 0 0 0 9.0 37.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 36 0 0 0 9.0 52.5							
10 0 0 0 0 -15.0 67.5 11 0 0 0 0 -14.0 75.0 12 0 0 0 0 -13.0 82.5 13 0 0 0 0 -12.0 90.0 14 0 0 0 0 -11.0 97.5 15 0 0 0 0 0.0 90.0 16 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 15.0 67.5 20 0 0 0 15.0 67.5 21 0 0 0 15.0 67.5 21 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 22.0 15.0 30 0 0 23.0 7.5 29 1 1 1 24.0 0.0 31 0 0 0 9.0 37.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 37 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5							
11 0 0 0 0 -14.0 75.0 12 0 0 0 0 -13.0 82.5 13 0 0 0 0 -11.0 97.5 15 0 0 0 0 0.0 90.0 16 0 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 21.0 22.5 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 23.0 7.5 31 0 0 0 6.0 22.5 32 0 0 0 9.0 33.0 7.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 34 0 0 9 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 37 0 0 0 9.0 37.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5							
12 0 0 0 0 -13.0 82.5 13 0 0 0 0 -12.0 90.0 14 0 0 0 0 -11.0 97.5 15 0 0 0 0 0.0 90.0 16 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 37.5 23 0 0 0 19.0 37.5 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 15.0 30 1 1 1 24.0 0.0 30 0 0 0 22.0 15.0 31 0 0 0 9 0 12.0 30.0 32 0 0 0 9 0 9.0 37.5 35 0 0 0 9.0 9.0 37.5 36 0 0 0 9.0 9.0 52.5							
13 0 0 0 0 -12.0 90.0 14 0 0 0 0 -11.0 97.5 15 0 0 0 0 0.0 90.0 16 0 0 0 0 11.0 97.5 17 0 0 0 0 12.0 90.0 18 0 0 0 12.0 90.0 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 19.0 37.5 25 0 0 0 21.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 21.0 30.0 30 0 0 0 22.0 15.0 28 0 0 0 22.0 15.0 30 0 0 0 22.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 37 0 0 0 9.0 37.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 40 0 0 9 -10.0 30.0 40 0 0 9 -10.0 30.0							
14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
15 0 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 15.0 67.5 21 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 23.0 7.5 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 9.0 37.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 34 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 37 0 0 0 9.0 37.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 40 0 0 9 -10.0 30.0 40 0 0 9 -10.0 30.0 41 0 0 0 -10.0 30.0							
16 0 0 0 0 11.0 97.5 17 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 22.0 15.0 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 0 12.0 15.0 32 0 0 0 0 9.0 37.5 32 0 0 0 0 9.0 30.0 33 0 0 0 0 9.0 37.5 35 0 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 37 0 0 0 9.0 37.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 40 0 0 9 -12.0 15.0 40 0 0 9 -12.0 15.0 41 0 0 0 -12.0 15.0						0	
17 0 0 0 0 12.0 90.0 18 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 0 15.0 67.5 21 0 0 0 0 15.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 23.0 7.5 31 0 0 0 6.0 22.5 32 0 0 0 9 9.0 37.5 32 0 0 0 9 9.0 30.0 33 0 0 0 9 9.0 37.5 35 0 0 0 9 9.0 37.5 36 0 0 0 9 9.0 52.5 36 0 0 0 9 9.0 37.5 37 0 0 0 9 9.0 37.5 38 0 0 0 9 9.0 37.5 39 0 0 0 9 -10.0 30.0 40 0 0 0 -12.0 15.0 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5							
18 0 0 0 0 13.0 82.5 19 0 0 0 14.0 75.0 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 10.0 30.0 33 0 0 0 0 9.0 37.5 35 0 0 0 0 9.0 37.5 36 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 -18.0 7.5							
19 0 0 0 0 15.0 67.5 20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 9.0 37.5 33 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 36 0 0 0 9.0 37.5 37 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 39 0 0 0 9.0 52.5 40 0 0 9 -10.0 30.0 40 0 0 9 -10.0 30.0 40 0 0 9 -12.0 15.0 42 0 0 0 -12.0 15.0 43 0 0 0 7.0 67.5							
20 0 0 0 15.0 67.5 21 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 10.0 30.0 33 0 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 9.0 52.5 36 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 39 0 0 0 9.0 6.0 22.5 41 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 42 0 0 0 -12.0 15.0 43 0 0 0 -18.0 7.5							
21 0 0 0 0 16.0 60.0 22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 10.0 30.0 33 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 42 0 0 0 -12.0 15.0 43 0 0 0 -18.0 7.5							
22 0 0 0 17.0 52.5 23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 9.0 30.0 33 0 0 0 9.0 37.5 35 0 0 0 9.0 37.5 36 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 37.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5							
23 0 0 0 18.0 45.0 24 0 0 0 19.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0.0 30.0 33 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 36 0 0 0 9.0 37.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5							
24 0 0 0 0 20.0 37.5 25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 9.0 30.0 33 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43							
25 0 0 0 20.0 30.0 26 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 0 6.0 22.5 32 0 0 0 0 0.0 30.0 33 0 0 0 0 10.0 30.0 34 0 0 0 9.0 52.5 36 0 0 0 9.0 52.5 36 0 0 0 9.0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 -7.0 67.5							
26 0 0 0 0 21.0 22.5 27 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 0 6.0 22.5 32 0 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 9.0 60.0 37 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -10.0 30.0 40 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
27 0 0 0 0 22.0 15.0 28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 0.0 30.0 33 0 0 0 10.0 30.0 34 0 0 0 9.0 52.5 36 0 0 0 9.0 60.0 37 0 0 0 9.0 52.5 38 0 0 0 9.0 52.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 6.0 30.0 40 0 0 0 9.0 6.0 22.5 41 0 0 0 9.12.0 15.0 42 0 0 0 7.0 67.5							
28 0 0 0 23.0 7.5 29 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 0.0 30.0 33 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 9.0 60.0 37 0 0 0 9.0 52.5 38 0 0 0 9.0 37.5 39 0 0 0 9.0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
29 1 1 1 1 24.0 0.0 30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0 0.0 30.0 33 0 0 0 10.0 30.0 34 0 0 0 9.0 52.5 36 0 0 0 9.0 60.0 37 0 0 0 9.0 52.5 38 0 0 0 9.0 37.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
30 0 0 0 12.0 15.0 31 0 0 0 6.0 22.5 32 0 0 0 0.0 30.0 33 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 -9.0 52.5 38 0 0 0 -9.0 52.5 39 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 7.0 67.5							
31 0 0 0 0 6.0 22.5 32 0 0 0 0 0.0 30.0 33 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 0 -9.0 60.0 37 0 0 0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
32 0 0 0 0 0 0.0 30.0 33 0 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 0 -9.0 60.0 37 0 0 0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
33 0 0 0 10.0 30.0 34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 0.0 60.0 37 0 0 0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
34 0 0 0 9.0 37.5 35 0 0 0 9.0 52.5 36 0 0 0 0.0 60.0 37 0 0 0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
35 0 0 0 9.0 52.5 36 0 0 0 0.0 60.0 37 0 0 0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 7.5 43 0 0 0 7.0 67.5							
36 0 0 0 0 0 0.0 60.0 37 0 0 0 0 -9.0 52.5 38 0 0 0 0 -9.0 37.5 39 0 0 0 0 -10.0 30.0 40 0 0 0 0 -6.0 22.5 41 0 0 0 0 -12.0 15.0 42 0 0 0 0 -18.0 7.5 43 0 0 0 0 7.0 67.5							
37 0 0 0 -9.0 52.5 38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
38 0 0 0 -9.0 37.5 39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
39 0 0 0 -10.0 30.0 40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
40 0 0 0 -6.0 22.5 41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
41 0 0 0 -12.0 15.0 42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
42 0 0 0 -18.0 7.5 43 0 0 0 7.0 67.5							
43 000 7.0 67.5							
						О	
44 000 -7.0 67.5							
	44		0 0	Ø	-/.0	1	6/.5

45 46 47 48 49 50 51 52 53 54 55 *ENDNODES		0 0 0 0 0 0	-7.0 7.0 26 27.0 40.0 -26 -27.0 -40.0 18.0 -26.0	82.5 82.5 75.0 75.0 82.5 75.0 75.0 75.0 7.5 67.5	
! beams list					
! beam nr. *BEAMS	i-th node nr.	j-th node nr.	mass [kg/m]	EA [N]	EJ [Nm^2]
1	1	2	60	4.0e8	1E8
2	2	3	60	4.0e8	1E8
3	3	4	60	4.0e8	1E8
4	4	5	60	4.0e8	1E8
5	5	6	60	4.0e8	1E8
6	6	7	60	4.0e8	1E8
7	7	8	60	4.0e8	1E8
8	8	9	60	4.0e8	1E8
9	9	10	60	4.0e8	1E8
		10	60		
10 11	10	12		4.0e8	1E8
12	11		60	4.0e8	1E8
	12	13	60	4.0e8	1E8
13	13	14	60	4.0e8	1E8
14	14	15	20	2.0e8	6E7
15	15 16	16	20	2.0e8	6E7
16	16	17	60	4.0e8	1E8
17	17	18	60	4.0e8	1E8
18	18	19	60	4.0e8	1E8
19	19	20	60	4.0e8	1E8
20	20	21	60	4.0e8	1E8
21	21	22	60	4.0e8	1E8
22	22	23	60	4.0e8	1E8
23	23	24	60	4.0e8	1E8
24	24	25	60	4.0e8	1E8
25	25	26	60	4.0e8	1E8
26	26	27	60	4.0e8	1E8
27	27	28	60	4.0e8	1E8
28	28	29	60	4.0e8	1E8
29	53	30	15	2.0e8	6E7
30	30	27	20	2.0e8	6E7
31	30	25	20	2.0e8	6E7
32	30	31	15	2.0e8	6E7
33	31	32	15	2.0e8	6E7
34	32	33	15	2.0e8	6E7

25	2.2	25	4.5	2 0-0	c=7
35	33	25	15	2.0e8	6E7
36	32	34	15	2.0e8	6E7
37	34	23	15	2.0e8	6E7
38	32	38	15	2.0e8	6E7
39	38	7	15	2.0e8	6E7
40	32	39	15	2.0e8	6E7
41	39	5	15	2.0e8	6E7
42	32	40	15	2.0e8	6E7
43	40	41	15	2.0e8	6E7
44	41	42	15	2.0e8	6E7
45	42	1	15	2.0e8	6E7
46	41	3	20	2.0e8	6E7
47	41	3 5	20	2.0e8	6E7
48	7	37	15	2.0e8	6E7
49	37	36	15	2.0e8	6E7
50	23	35	15	2.0e8	6E7
51	35	36	15	2.0e8	6E7
52	36	21	20	2.0e8	6E7
53	36	43	15	2.0e8	6E7
54	43	19	15	2.0e8	6E7
55	36	44	15	2.0e8	6E7
56	44	11	15	2.0e8	6E7
57	11	45	15	2.0e8	6E7
58	45	15	15	2.0e8	6E7
59	15	46	15	2.0e8	6E7
60	46	19	15 15		6E7
	19			2.0e8	
61		48	20	2.0e8	6E7
62	48	49	20	2.0e8	6E7
63	49	47	20	2.0e8	6E7
64	47	48	20	2.0e8	6E7
65	47	19	20	2.0e8	6E7
66	47	17	20	2.0e8	6E7
67	13	50	20	2.0e8	6E7
68	50	11	20	2.0e8	6E7
69	11	51	20	2.0e8	6E7
70	51	52	20	2.0e8	6E7
71	52	50	20	2.0e8	6E7
72	13	15	20	2.0e8	6E7
73	15	17	20	2.0e8	6E7
74	9	36	20	2.0e8	6E7
75	50	51	20	2.0e8	6E7
76	53	29	15	2.0e8	6E7
77	14	50	10	4.0e8	6E7
78	16	47	10	4.0e8	6E7
79	9	54	11.5	4.0e8	6E7
80	54	52	11.5	4.0e8	6E7
81	21	55	11.5	4.0e8	6E7
82	55	49	11.5	4.0e8	6E7
*ENDBEAMS					

! alpha and beta values to define the damping matrix *DAMPING
0.1135 2.6514e-04