

10/31/01

ME/AE 339

The results below gives answers to Problem 1, Part 2, Test 2.

$\tau = t \alpha/a^2$, where a is the side dimension of the square cross section.

$dtau = 1.2500000E-02$

n = 4

$\tau = 1.2500000E-02$

Rows and columns are as follows:

	i = 1	2	3	4	5
j =	1				
	2				
	3				
	4				
	5				

Theta* values: [$\theta = (T - T_{zero})/(T_{bottom} - T_{zero})$]

Results from first stage (implicit in x-direction)

i=1	i=2	i=3	i=4	i=5
1.000000	1.000000	1.000000	1.000000	1.000000
0.2500000	0.1129695	0.1056338	0.1546361	0.7500000
0.2500000	2.1420188E-02	7.0422534E-03	6.3086852E-02	0.7500000
0.2500000	6.7194834E-02	5.6338027E-02	0.1088615	0.7500000
0.5000000	0.5000000	0.5000000	0.5000000	0.5000000

Results from second stage (implicit in y-direction)

i=1	i=2	i=3	i=4	i=5
1.000000	1.000000	1.000000	1.000000	1.000000
0.2500000	0.1934140	0.1789493	0.2697051	0.7500000
0.2500000	6.1578389E-02	3.4715332E-02	0.1437380	0.7500000
0.2500000	0.1171229	9.6789658E-02	0.1934140	0.7500000
0.5000000	0.5000000	0.5000000	0.5000000	0.5000000