

## Chapter7\_example2

The Reynolds Number at  $x=1$  ft is  $1.108e+05$

The average convection coefficient at  $x=1$  is  $146.0$  BTU/(hr. sq.ft. degree Rankine)

The heat transferred to water over the  $x=1$  ft is  $1.314e+04$  BTU/hr

The Reynolds Number at  $x=2$  ft is  $2.216e+05$

The average convection coefficient at  $x=2$  is  $103.2$  BTU/(hr. sq.ft. degree Rankine)

The heat transferred to water over the  $x=2$  ft is  $1.858e+04$  BTU/hr

Solution Chart for example 7.2

eta	theta	y, ft	T, degree F
0.0	1.00	0.0e+00	100.0
0.2	0.75	6.0e-04	85.0
0.4	0.51	1.2e-03	70.6
0.6	0.31	1.8e-03	58.6
0.8	0.17	2.4e-03	50.2
1.0	0.08	3.0e-03	44.8
1.2	0.01	3.6e-03	40.6