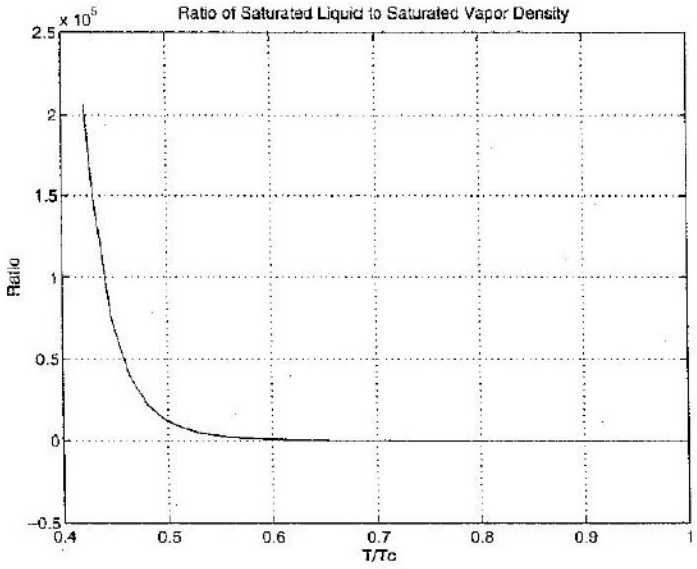
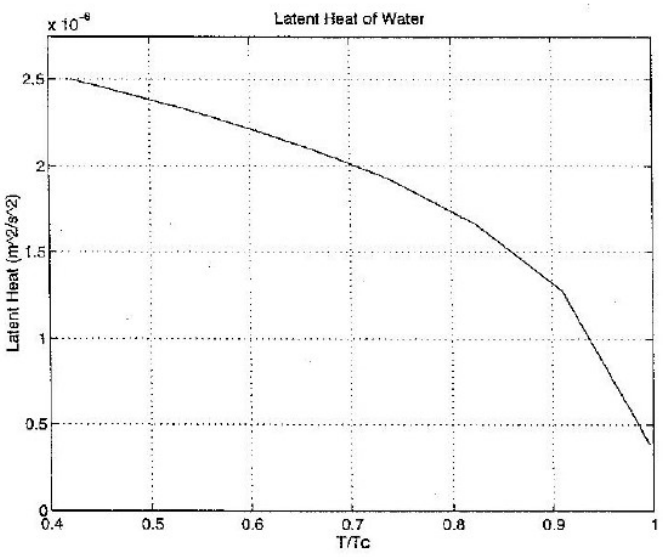
Solution to Problem 100A:

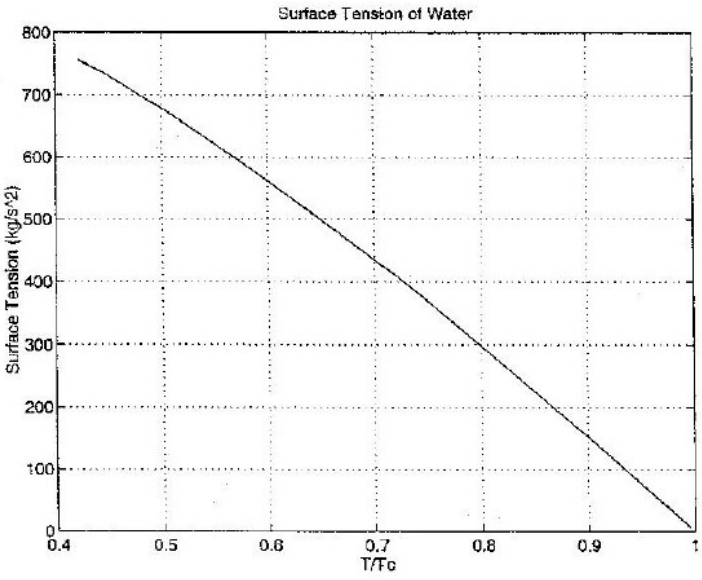
- The temperature and pressure at the triple point of water: $T_t = 273°K$; $p_t = 611Pa$
- The temperature and pressure at the critical point of water: $T_c = 647°K$; $p_t = 22.1MPa$



- The temperature and pressure at the triple point of oxygen: $T_t = 54.3°K$; $p_t = 150Pa$
- The temperature and pressure at the critical point of oxygen: $T_c = 155°K$; $p_t = 5.08MPa$
- It tends to zero as shown below for water.



- It tends to zero linearly as shown below for water.


Surface Tension of Water
Surface Tension (kg/s^2)
T/Tc
800
700
600
500
400
300
200
100
0
0.4
0.5
0.6
0.7
0.8
0.9
1