

**ME 24-221**  
**Thermodynamics I**

Quiz No: 2  
September 22 2000  
Instructor: J. Murthy  
15 minutes  
Open textbook, closed notes

A closed rigid tank initially contains water at a pressure of 1MPa and a specific volume of  $0.23268 \text{ m}^3/\text{kg}$ . It is cooled to a temperature of  $165^\circ\text{C}$ .

1. What is the initial temperature in the tank?
2. What is the final pressure in the tank?
3. What is the final quality?
4. Draw the process on a P-v diagram.