RECAP 2.2:
STATE DETERMINATION, INTERPOLATION, IG

- State determination (pure substance)
  * Use the saturated property table to obtain $T_{sat} / P_{sat}$
  * Report the results on P- is or T- is diagram.
  * Comparison of $P_{sat} / T_{sat}$ with the values of $P / T$ given in problem determines the state of the substance.

- Interpolation
  Used to find properties @ missing T/P entries
  Assumed linear variation of property of interest between T/P values immediately below and above the target T/P value.

- IG equation of state.
  \[
  P \nu = m \bar{R} T
  \]
  \[
  \Rightarrow P \nu = R \bar{T}
  \]

  total volume  make number  universal gas constant
  specific volume  gas constant (material specific)