IDEAL GAS

Equation of state for ideal gas

$$pV = mRT$$

R = Gas Constant (kJ/kg.K)

(constant for a gas, value depends on type of gas)

$$R = \frac{R_u}{M}$$

$$R_u = Universal\ Gas\ Constant$$

$$= 8.314 \left[\frac{kJ}{kmol.K} \right]$$

$$R = \frac{p_1 V_1}{T_1 m_1} = \frac{p_2 V_2}{T_2 m_2}$$