

Example 3.9

Result

(a) By the Ideal-gas Equation

The Molar Volume is

$$1.6961$$

$$\text{m}^3/\text{kmol}$$

(b) The Generalized compressibility-factor Correlation

The Molar Volume is

$$1.48$$

$$\text{m}^3/\text{kmol}$$

(c) The Generalized Virial-coefficient Correlation

The Molar Volume is

$$1.4908$$

$$\text{m}^3/\text{kmol}$$