PROBLEM 11.107

KNOWN: Data are provided for a mixture of CO₂ and CH₄.

FIND: Estimate (a) the specific volumes of CO₂ and CH₄, (b) the partial molar volumes of CO₂ and CH₄ for an equimolar mixture.

ENGINEERING MODEL: The mixture is the closed system.

ANALYSIS: Using the data provided, the following plot can be developed. The method of intercepts (Sec. 11.9.1) allows the partial molar volumes to be found.