

CHAPTER OVERVIEW

8: Calculus in More than One Variable

Chapter Objectives

- Review the concept of partial derivative.
- Review the properties of partial derivatives.
- Be able to use the properties of partial derivatives in the context of physical chemistry problems.
- Review the concept of double and triple integrals.
- Learn the concept of equation of state. Understand the concept of a van der Waals gas from the molecular point of view.
- Learn about phase transitions and critical phenomena.

[8.1: Functions of Two Independent Variables](#)

[8.2: The Equation of State](#)

[8.3: The Chain Rule](#)

[8.4: Double and Triple Integrals](#)

[8.5: Real Gases](#)

[8.6: Problems](#)

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