

CHAPTER OVERVIEW

59: Partial Derivatives

Before introducing the advanced Lagrangian and Hamiltonian formulations of classical mechanics, we'll need a some additional mathematical background, since the equations of these formulations are expressed in the language of partial differential equations. We will leave the methods for solving such equations to a more advanced course, but we can still write down the equations and explore some of their consequences. First, in order to understand these equations, we'll first need to understand the concept of partial derivatives.

[59.1: First Partial Derivatives](#)

[59.2: Higher-Order Partial Derivatives](#)

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