

Lab 6: Vector Functions in Two Dimensions

Lab6.ma is a *Mathematica* notebook that uses the **ParametricPlot** command to study the path of a particle in two dimensions. It generalizes the analysis done in Lab 2. It defines the trajectory of the particle and the velocity vector. It also analyzes curves defined with polar coordinates.

Like all *Mathematica* notebooks, this one is used by opening its cells and executing its *Mathematica* commands. To open a cell, double-click on its cell bracket. To execute a *Mathematica* command, click on its cell bracket to select it, and then press the Enter key (not the Return key).

Lab6.wn explains how to work through **Lab6.ma** on the NeXT.

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Category:

Mathematics

Usage:

This software is used by students enrolled in Multivariate Calculus at the University of Richmond.

Version:

This software uses Mach 2.0
and *Mathematica* 2.0

References:

This software refers to the two books:

Calculus and Analytic Geometry, Fourth Edition

by Sherman K. Stein (McGraw-Hill, 1987).

A Guidebook to Calculus with Mathematica

by Philip Crooke and John Ratcliffe (Wadsworth, 1991).