

MATH 223 Spring 2025

Assignment 27

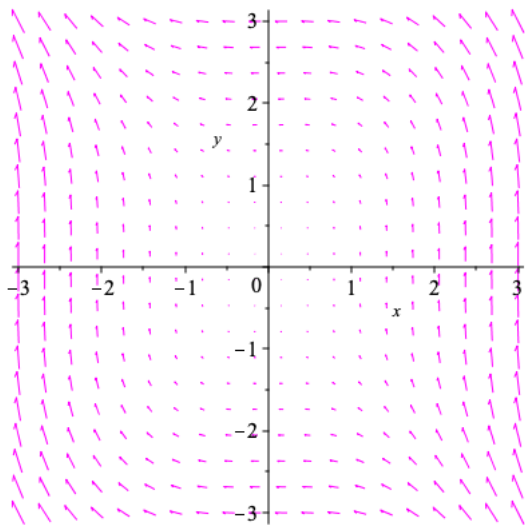
Due: Wednesday, April 30

Reading

Read carefully Section 7.3 “Arc Length and Weighted Curves” in our text *Multivariable Calculus: A Linear Algebra Based Approach*.

Writing

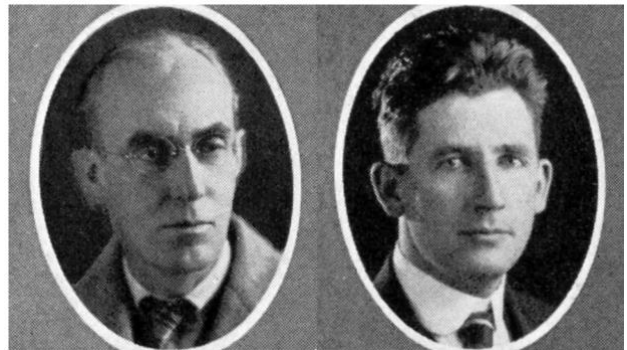
Write out careful and complete solutions of Exercises 9ac, 10df, 11, 13, and 16 of Chapter 7.



Problem 16a

Plot of Vector Field $F(x, y) = (-y^2, 2x^2)$

Maple Command: `fieldplot([-y2, 2x2],
x = -3 .. 3, y = -3 .. 3, color = magenta)`



Charles W. Cobb and Paul H. Douglas