

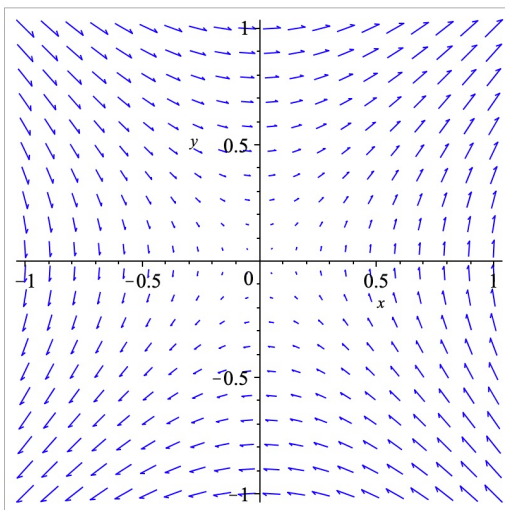
MATH 223      Fall 2023  
Assignment 15  
**Due: Friday, October 20**

**Reading**

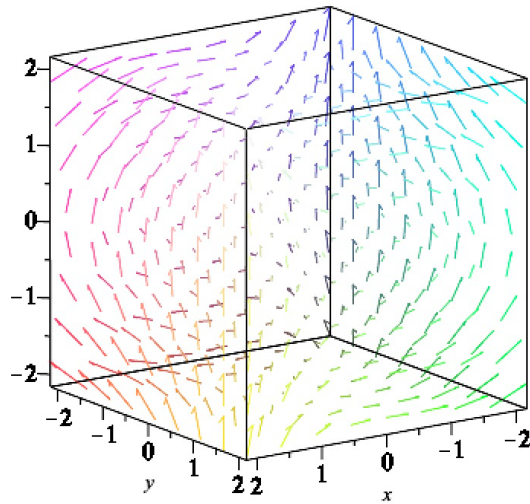
Read carefully Section 5.4 “Normal Vectors” in our text *Multivariable Calculus: A Linear Algebra Based Approach*.

**Writing**

Write out careful and complete solutions of Exercises 7, 8ab, 10, 11 and 12 of Chapter 5.



The Vector Field  $\mathbf{F}(x,y) = (y,x)$  for  $-1 \leq x \leq 1, -1 \leq y \leq 1$ .



The Vector Field  $\mathbf{F}(x,y,z) = (yz, xz, x^2)$  for  $-2 \leq x \leq 2, -2 \leq y \leq 2, -2 \leq z \leq 2$ .