Math 4377, Brief Notes

1 June 4

Review on Chapter 1: Definitions and examples of fields; Linear combinations and equivalence of systems of linear equations; Row equivalence of matrices and, ultimately, the unique representative of this class, the row-reduced echelon matrix; matrix multiplication, viewing premultiplication as row manipulation, Matrix products and invertible matrices.

Lecture on 2.1: Vector spaces, 2.2 Subspaces Definition of a vector space over a field $F$. Examples. Properties of vector spaces. The subspace criterion (Theorem 1 on P. 35). Examples of subspaces.