Character Tables for Representations of Finite Groups

Jared Stewart

April 21, 2016

Abstract

I will introduce the topic of representation theory of finite groups and give some examples. We'll then discuss complete reducibility and Mashcke's theorem, Schur's Lemma, and the Isotypical Decomposition. Finally we will define the character table of a representation and compute the character tables of D_3 and D_4.