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On rank and nullity.

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Summary: This note explains how Emil Artin's proof that row rank equals column rank for a matrix with entries in a field leads naturally to the formula for the nullity of a matrix and also to an algorithm for solving any system of linear equations in any number of variables. This material could be used in any course on matrix theory or linear algebra.

Classification: H65

Keywords: matrices; field; row rank; column rank; nullity; system of linear equations; Cramer's rule; determinants

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