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**Dustin Cartwright\***, Department of Mathematics, 227 Ayres Hall, Knoxville, TN 37996-1320. *A quantitative version of Mnev's theorem.*

Mnev's theorem says that, roughly speaking, the geometry of any set of polynomial equations can be captured by a system of point-line incidences in the plane. I will talk about a version of Mnev's theorem over the integers, for which the size of the point-line configuration can be made explicit. In the process, I will explain some of the ingredients which go into the construction, and I will end with an application to tropical geometry. (Received August 29, 2014)