1067-51-592 **Rebecca F Goldin*** (rgoldin@math.gmu.edu), MS 3F2, 4400 University Drive, Fairfax, VA 22030. A Meeting of Algebra and Geometry in Decorated Graphs.

How many different lines intersect four fixed lines generically placed in \mathbb{R} ? Such questions in enumerative geometry have been translated into equivalent questions about the ring structure of algebraic invariants associated to some special symplectic manifolds. These algebraic questions have in turn been translated into combinatorial questions about an algebra associated to decorated graphs. We will show how this dictionary of works for a set of nice algebraic varieties and discuss how it can be generalized to a larger set of manifolds. (Received September 10, 2010)