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**Robert Silversmith\*** (rsilvers@umich.edu). *A mirror theorem for  $\mathrm{Sym}^d(\mathbb{P}^r)$ .*

Through 3 general points and 6 general lines in  $\mathbb{P}^3$ , there are exactly 190 twisted cubics; 190 is a Gromov-Witten invariant of  $\mathbb{P}^3$ . Mirror symmetry is a conjecture about the structure of all Gromov-Witten invariants of a smooth complex variety (or orbifold). The conjecture is known for toric orbifolds and some of their complete intersections. We prove it in the case of the nontoric orbifold  $\mathrm{Sym}^d(\mathbb{P}^r)$ . This orbifold is of particular interest because when  $r = 2$ , its Gromov-Witten invariants are conjecturally related to those of the Hilbert scheme  $\mathrm{Hilb}^d(\mathbb{P}^2)$ . (Received February 06, 2017)