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Richard G. Belshoff* (RBelshoff@MissouriState.edu), Department of Mathematics, Missouri State University, Springfield, MO 65897. *Reflexive Covers and Envelopes*. Preliminary report.

We introduce the notion of a reflexive cover and a reflexive envelope of a finitely generated module. We show that reflexive covers exist for all modules over a Gorenstein local ring of dimension at most two; these reflexive covers are precisely the Gorenstein projective covers. In fact for such a ring the finitely generated reflexive modules coincide with the finitely generated Gorenstein projective modules. We show that reflexive envelopes exist for all modules over a ring that is either a Gorenstein ring or locally an integral domain. (Received September 15, 2007)