1107-13-253Thomas Dunn* (thomas.dunn@ndsu.edu), Department of Mathematics #2750, PO Box 6050,
Fargo, ND 58108. Integral Closure and Achilles-Manaresi Multiplicity Sequence.

When R is a local noetherian ring and I is an ideal we have the Achilles-Manaresi multiplicity sequence $c_i(I)$ for $i = 0, ..., \dim R$. We will give a formula for this multiplicity sequence using local j multiplicities. Under certain other restrictions, if $I \subseteq J$ are ideals with the same multiplicity sequence, then we have that I and J have the same integral closure. (Received January 16, 2015)