1126-03-361   **Matthew Moore*** (`matthew.moore@math.mcmaster.ca`). *Decidability in Universal Algebra.*

Many properties associated with the relational and operational clones of total algebras are suspected to be undecidable. We will examine two such properties: finite relatedness and finite dualizability. Both properties can be generalized to partial algebras, thus making the respective decision problems more computationally difficult. Of these two more computationally difficult problems, it can be shown that it is undecidable whether a partial algebra is finitely dualizable. Specifically, given a Minsky machine M, we construct a partial algebra A(M) such that A(M) is finitely dualizable if and only if M halts. (Received January 17, 2017)