1056-03-214 **Amy Turlington*** (turlington@math.uconn.edu). *Computable distributive lattices and Heyting algebras.*

We provide several results on computable distributive lattices, particularly pseudocomplemented distributive lattices and Heyting algebras. First, we prove that it is always possible to find a computable maximal (or minimal) prime ideal in a computable (pseudocomplemented) distributive lattice or Heyting algebra. We then investigate the computable dimension of these structures. A main result here is that the free Heyting algebra on infinitely many generators has computable dimension ω. (Received August 15, 2009)