1078-08-41 Brian A. Davey* (B.Davey@latrobe.edu.au) and Jane G. Pitkethly. Counting the relations compatible with an algebra.

We investigate when a finite algebra admits only a finite number of compatible relations (modulo a natural equivalence). This finiteness condition is closely related to others in the literature, and arises naturally in duality theory. We find necessary conditions for a finite algebra to admit only finitely many compatible relations, as well as a family of examples of such algebras. (Received November 07, 2011)