962-13-279 **Daniel D Anderson*** (dan-anderson@uiowa.edu), Department of Mathematics, The University of Iowa, Iowa City, IA 52242, and **Tiberiu Dumitrescu** (tiberiu@al.math.unibuc.ro), Facultatea de Matematică, Universitatea Bucureşti, Str. Academiei 14, RO-70190 Bucharest, Romania. *Condensed Rings.*

A commutative ring R is condensed (strongly condensed) if for ideals I, J, $IJ = \{ij | i \in I, j \in J\}$ ($IJ = iJ$ for some $i \in I$ or $IJ = Ij$ for some $j \in J$). Condensed domains were introduced by D.F. Anderson and Dobbs, strongly condensed domains by Gottlieb. We show that for a Noetherian domain D, D is condensed $\iff$ $\text{Pic}(D) = 0$ and D is locally condensed, while D is strongly condensed $\iff$ D is a PID or D has exactly one maximal ideal M that is not principal and D_M is strongly condensed $\iff$ $\dim D \leq 1$, $\text{Pic}(D) = 0$, and D'/D is serial. A domain D is strongly condensed $\iff$ D is a PID or D has exactly one maximal ideal M not principal of height one, D_M is strongly condensed, and D has Noetherian spectrum. An integrally closed domain D is strongly condensed $\iff$ D is a Bezout generalized Dedekind domain with at most one maximal ideal of height greater than one. A local domain is strongly condensed $\iff$ it has the two-generator property. We give equivalencies for a local domain with finite integral closure to be strongly condensed. For fields $k \subseteq K$, the domain $D = k + XK[[X]]$ is condensed $\iff$ $[K : k] \leq 2$ or $[K : k] = 3$ and each degree-two polynomial in $k[X]$ splits over k, but D is strongly condensed $\iff$ $[K : k] \leq 2$. (Received September 07, 2000)