

This thesis aims to define a theory of divisibility for general integral domains. A hierarchy of divisibility domains with properties to those of division on the integers is outlined. Chinese residue theorem is generalized by means of ideals in order to demonstrate weakening of generalization, that provides more effective tools. The thesis is prepared for all those interested in mathematics who want to get an insight into the theory of divisibility, so we build the theory from the beginning and compare it with division on integers.