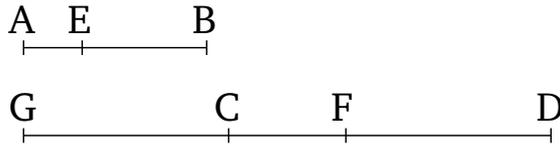


Book 7

Proposition 7

If a number is that part of a number that a (part) taken away (is) of a (part) taken away then the remainder will also be the same part of the remainder that the whole (is) of the whole.



For let a number AB be that part of a number CD that a (part) taken away AE (is) of a part taken away CF . I say that the remainder EB is also the same part of the remainder FD that the whole AB (is) of the whole CD .

For which(ever) part AE is of CF , let EB also be the same part of CG . And since which(ever) part AE is of CF , EB is also the same part of CG , thus which(ever) part AE is of CF , AB is also the same part of GF [Prop. 7.5]. And which(ever) part AE is of CF , AB is also assumed (to be) the same part of CD . Thus, also, which(ever) part AB is of GF , (AB) is also the same part of CD . Thus, GF is equal to CD . Let CF have been subtracted from both. Thus, the remainder GC is equal to the remainder FD . And since which(ever) part AE is of CF , EB [is] also the same part of GC , and GC (is) equal to FD , thus which(ever) part AE is of CF , EB is also the same part of FD . But, which(ever) part AE is of CF , AB is also the same part of CD . Thus, the remainder EB is also the same part of the remainder FD that the whole AB (is) of the whole CD . (Which is) the very thing it was required to show.