1023-N1-637 **Ruggero Ferro*** (ferro@sci.univr.it), via Gabelli 57, 35121 Padova, Italy. *From an analysis of definitions to a view of mathematics.*

It is impossible to give a meaning to all words through explicit definitions. Indeed one would be bound either to vicious circles or to infinite descents. Hence mathematics assume certain words as primitive, i.e. words the meaning of which is assumed to be known even without definitions. An attempt to specify the meaning of a primitive word using the language could consist in describing the properties, the behavior and the characteristics of the meaning of that word (these descriptions may use the word the meaning of which is being looked for). This attempt would succeed if a rich enough description can be obtained such that it is satisfied only by that meaning. In mathematical logic, it is shown that, no matter how rich a language could be, even if the description consists of all the sentences in the rich language that are true of a certain notion, there are non isomorphic notions that satisfy the same description. Thus even the axiomatic approach cannot specify the meaning of a primitive word. Hence the language is not adequate to identify the primitive notions of mathematics. But, is there a meaning of the primitive words? If so, how to specify it, and how to communicate it? (Received September 19, 2006)