This thesis aims to summarize the development of certain concepts from the theory of recursive functions, such as primitive recursion, partial recursive functions, and recursively enumerable sets. It focuses on the key contributions of Kurt Gödel, Stephen Cole Kleene, and other authors, with particular attention given to Emil Post, who is often overlooked in this context. The paper also examines how this theory developed in the context of the emergence of other computational models, primarily the machines described by Alan Turing in 1936. The paper mainly draws on primary sources but also considers editor comments from later-published collections and additional secondary sources, including comments from the authors themselves from later periods.