A PROFESSIONAL MATHEMATICIAN

Ronald L. Graham shows what math can do

Meet Ronald L. Graham, director of Bell Laboratories Mathematical Studies Center. Mr. Graham is one of the world's leading authorities on the Ramsey theory, a difficult field of theoretical mathematics. In working on this theory, he used the largest number ever used in a mathematical proof, a feat that landed his name in the *Guinness Book of World Records.*

Mr. Graham runs a huge department that is responsible for finding the most efficient way to route millions of telephone calls a day. The techniques he has developed have important applications in economics and computer science as well as a host of other fields. Mr. Graham has used them, for example, to help NASA develop schedules for astronauts to follow on space flights.

Currently Mr. Graham is looking for ways to get specific information from huge banks of data. For example, census figures tell us the average age of farmers in the United States. Are the ages of individual farmers hidden in that figure? If so, can they be found? A relatively easy example of the problem follows.

The average age of Althea and Bartles is thirty-five. The average age of Althea and Cuthbert is twenty-six. The average age of Bartles and Cuthbert is thirty-seven. How old is each?