Part II, which makes up about 60 percent of this short volume, consists of three chapters, each of which describes a different autocode. The word "autocode" as used in England corresponds roughly to "compiler language" in the United States. The authors apparently consider an autocode to be machine-dependent, in contrast to a "universal computing language" like Algol, which is machine independent. The three autocodes discussed are for the Pegasus-Sirius, the Elliott 803, and the Ferranti Mercury. The machines themselves are not described here in any detail. They are all rather small machines, and are not of very great general interest. Unfortunately, the same is true of their autocodes. The Mercury autocode is treated at greatest length and in greatest detail. It is an interesting system, but its interest is now mostly historical, illustrating some of the early work of Brooker and his colleagues at Manchester. Most of the material in this book will be of interest only to the devoted specialist and perhaps to the historian in the field of computer languages.

A final section of the book presents a 14-page discussion of Algol. It is a good but very brief resumé of the language.

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28[Z].—IRVING ALLEN DODES, *IBM 1620 Programming for Science and Mathematics*, Haden Publishing Company, Inc., New York, 1963, ix + 276 p., 24 cm. Price $9.95.

This is a very thorough and carefully written text on programming the IBM 1620. The author is chairman of the mathematics department of the Bronx High School of Science, where a course in numerical analysis has been given successfully to seniors. The course includes learning to program the 1620. This text is an outgrowth of a manual used in that course. The general style is obviously influenced by the high-school audience for which it was first intended, but this should not be construed to mean that the book is limited to such an audience. Rather, one could recommend it as a text for any audience unfamiliar with the programming of modern computers and wishing to learn something about this by using the 1620 as a specific machine.

There are four parts. Part 1 is a somewhat elementary treatment of number systems and numerical methods. Part 2 is an extensive discussion of 1620 machine programming. Part 3 describes the symbolic programming system (SPS), and part 4 treats Fortran with Format.

There are numerous exercises and illustrative examples. The material is well-organized and presented with great care.

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29[Z].—SEYMOUR GINSBURG, *An Introduction to Mathematical Machine Theory*, Addison-Wesley Publishing Co., Inc., Reading, Mass., 1962, ix + 148 p., 23 cm. Price $8.75.