approximation to the binomial distribution, then we have approximately that the variate $(o_i - e_i)/e_i^{1/2}$ is normally distributed, as before, and with a clearer idea of the nature of the approximations involved.

Hele's School, Exeter. J. V. WILD

CORRESPONDENCE

A SET AMBIGUITY

To the Editor, *The Mathematical Gazette*

SIR,

Brevity is the soul not only of wit. Brought up in the school of Hardy and Littlewood, I prize elegance exemplified in economy of expression. Thus my gorge rises at the sight, in a Common Entrance paper of "Find the solution set of..." for "Solve...". But more—this circumlocution is inexact. For the conventions attending the definition of a set require that all its elements be distinct: thus the solution sets of $x^2(x - 1) = 0$ and $x(x - 1)^2 = 0$ are alike $\{0, 1\}$. But the l.h.s.'s are different polynomials and their roots are *not* the same, so neither in any precise sense are the solutions of the equations. I have not seen any acknowledgement of this ambiguity, to which blind adherence to the use of "set language", regardless of its appropriateness, gives rise.

Yours sincerely,

Blundell's School, Tiverton, Devon. A. R. PARGETER

REVIEWS

The Present Position of Applied Mathematics in the United Kingdom. By JOHN HEADING. Pp. 41. 1969. (University of Wales Press: Cardiff.)

Dr. Heading has recently been appointed as Professor of Applied Mathematics at Aberystwyth, and this is his Inaugural Lecture. As the title shows, he is concerned about that modern conflict—pure mathematics v. applied mathematics.

Some people may be surprised that I should call it a "modern" conflict. But such it is. For until fairly recently there was just one subject, called mathematics, and no distinction was made. Yet today people are unsure about what constitutes applied mathematics. This is particularly so at school level, where it consists mostly of statics and dynamics, and is also taught in physics. Certainly it has not yet shared in the developments in pure mathematics at school level, loosely (but inaccurately) referred to as the "new mathematics".

The explanation is simple, though this lecture does not properly bring it out: elementary applied mathematics is much harder than elementary pure mathematics. Genuine applied mathematics—i.e. the construction of models that will be an abstraction for the terribly complex real world in which we