uniquely by $\overrightarrow{OA}$ and $\overrightarrow{OB}$ respectively this defines the point C, and hence the line segment $\overrightarrow{OC}$, uniquely. The 'parallelogram law' now follows as an immediate corollary.

The sum of two line segments $\overrightarrow{AB} + \overrightarrow{CD}$ may be defined by $\overrightarrow{AB} + \overrightarrow{CD} = \overrightarrow{AX}$ where $X = (s + t)(A)$, s and t being defined by $\overrightarrow{AB}$ and $\overrightarrow{CD}$ respectively. Two line segments $\overrightarrow{XY}$ and $\overrightarrow{X'Y'}$ may be defined as equivalent, written $\overrightarrow{XY} = \overrightarrow{X'Y'}$, if $XY = \|X'Y'\|$. It is easy to prove that "=" is an equivalence relation and that $\overrightarrow{AB} + \overrightarrow{CD} = \overrightarrow{CD} + \overrightarrow{AB}$, $\overrightarrow{AB} + \overrightarrow{BC} = \overrightarrow{AC}$, etc. (In fact, this may be expressed as the addition of equivalence classes.) In this way the ordinary rules of manipulation may be justified. In addition, the sum C of two points A and B relative to some fixed origin O can be defined by $\overrightarrow{OC} = \overrightarrow{OA} + \overrightarrow{OB}$, which may be written as $(\mathbf{a} + \mathbf{b})(O) = \mathbf{a}(O) + \mathbf{b}(O)$ corresponding to the usual rule for the addition of mappings.

J. E. G. FARINA

Department of Mathematics, The University, Nottingham NG7 2RD

SMP revision material

DEAR MR. QUADLING,

The March 1974 edition of *Mathematical Gazette* included a review of *SMP Cards* 1, published by the Cambridge University Press, in which the reviewer commented on the "total lack of revision cards". We should, of course, have drawn attention to the fact that a pack of stencils containing revision material as well as stencils for producing the duplicated sheets required for use with the cards is available separately at £10.

Yours sincerely,

VALERIE DAVIES

Publicity Controller, Cambridge University Press, 200 *Euston Road, London NW1 2DB*

Reviews

Statistical methods and scientific inference (3rd edition), by R. A. Fisher. Pp viii, 182. £4·95. 1973. SBN 0 02 844740 9 (Collier–Macmillan)

Ronald Aylmer Fisher (1890–1962) raised the theory and practice of statistics to much higher levels of achievement than had previously been attained. The combination of a penetrating scientific insight and a powerful mathematical apparatus enabled him to create new areas of research, many of them still active. He published six books, and his collected papers are currently being issued in five volumes containing almost 300 separate articles. His work was not confined to statistics but extended to biometrical and evolutionary genetics, where his impact was also considerable. All these contributions to knowledge were fully recognised during his lifetime by the honours showered upon him.

The stimulus for his statistical work was the need to draw conclusions from scientific enquiries where the data are subject to appreciable random variation. In this process, three aspects are particularly important. They are: the planning of the enquiry, the derivation of relevant sampling distributions, and the procedures of inference. When Fisher began his career, all three aspects were in a state which now appears quite primitive. His first important paper studied the distribution of the correlation coefficient in samples from a bivariate normal distribution. Some results on the sampling theory of functions of