obvious that the woman who is most likely to develop breast cancer is the woman who is least likely to transmit it; under such circumstances, breast cancer would gradually be eliminated. Such does not seem to be the case.

Finally, let us say that before we make any such radical recommendations as that of urging mothers not to nurse their female children if there is a history of breast cancer in the family, there should be an extensive survey to ascertain facts. An endeavor should be made to trace all women whose mothers died in childbirth or within two hours after, and who can definitely prove that they never were nursed by a wet nurse; and to estimate the percentages, if any, of these who have breast cancer, in order to compare this with those women who have been nursed by their mothers. Due attention must be paid to having comparable age groups in the two classes and to the elimination of those groups in which a possible true heredity of breast cancer from either paternal or maternal side of the family might exist. Should it then be found that women whose mothers so died, and who were not nursed at all, have none or significantly less breast cancer than have women in a comparable group but who were nursed, we may have some data on which to base conclusions. Even then, the late age at which cancer develops will serve as an obstacle in any program of elimination either by not breeding or by not nursing.

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Book Reviews

College mathematics: a general introduction. **Charles H. Sisam. New York: Henry Holt, 1946. Pp. xiii + 561. $3.50.**

This book might well be subtitled *What every student of mathematics should know.* Beginning with a review of algebra, it includes plane and spherical trigonometry; analytic geometry, both plane and solid; college algebra; and an introduction to some ideas of the calculus. The review is not merely a repetition of a high school course but is presented in adult fashion with amplifications and applications which give the subject fresh interest. Teachers who cannot give class time to algebra will be glad to have in the volume they are using for other subjects the things to which their students so often need to be referred.

Both trigonometry and analytic geometry are compact but complete, covering all the usual theory in fewer than the usual number of pages but with plenty of explanation and exercises. The unusual method developed for the reduction of functions of angles greater than 90° is most economical for that purpose and for later use in connection with the addition formulas. It is interesting to find, in the first paragraph of the chapter on conic sections, pictures of the ellipse, parabola, and hyperbola cut from a right circular cone, with a reference to their historical background in Greek geometry, while after individual treatment of the curves is given their single definition in terms of focus, directrix, and eccentricity. This emphasis on the relationship of the conics is most desirable. With a discussion of tangents and normals comes naturally the basic idea of the differential calculus and its simplest geometric application, maxima and minima. To this, by a judicious mixture of definition and intuition, are added simple indefinite integrals, the definite integral, and area under a curve, making it possible for freshmen to get some notion of a subject whose name has often suggested only mystery. The chapters on the graph of an equation offer the student an opportunity to use all his acquired knowledge in the study of algebraic and transcendental curves, both in rectangular and polar coordinates and in parametric form. This might be an interesting conclusion for a course the emphasis of which has been largely geometric.

There is provision, however, for a more inclusive course as well as for one providing more variety of subject matter. Geometry may continue with a glimpse into three dimensions, dealing with the plane, line, and quadric surfaces in standard form. From the field of college algebra there is a selection of topics, interesting in themselves and valuable for a student who will continue mathematics. In connection with his treatment of probability the author distinguishes between mathematical and empirical probability, making it possible for the student to see applications to subjects from which the use of the classical definition alone would exclude it.

The final chapters, on spherical trigonometry, serve to complete all the material which commonly enters into a first-year course in mathematics. The average class would never cover all of it, though individual gifted students might conceivably gain a bird's-eye view of these fields through its use. Teachers will find here abundant choice for the course fitted to their purposes and will like the logical and direct method of presentation.

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The Cavendish Laboratory. **Alexander Wood. Cambridge, Engl.: At the Univ. Press; New York: Macmillan, 1946. Pp. 59. (Illustrated.) $1.00.**

This is a brief but stimulating history of the famous Physics Laboratory. The list of Cavendish professors