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A Cambridge Correspondence Class in Arithmetic for Women

Abstract

In 1871 the newly founded Newnham College, Cambridge began sponsoring correspondence classes for women vying for certificates on the Cambridge Local Examinations. These classes were designed for women who lived in remote areas devoid of suitable teachers and for governesses who did not have sufficient control over their time to permit them to attend classes or receive oral instruction. In 1872, eighteen women enrolled in the arithmetic class organized by William Henry Hoar Hudson a Fellow of St. John's College, Cambridge. Hudson had been Third Wrangler on the 1861 Cambridge Mathematical Tripos. In 1881, he accepted a position as Professor of Mathematics at King's College, London and served in that position until 1903. For the 1872-73 class, he sent candidates a list of mathematical problems at fortnight intervals. The topics covered included measures and multiples, vulgar fractions, ratio, proportions, decimal fractions, and interest. The solutions were to be returned in a week's time with the students spending at most two hours in obtaining their solutions. Hudson urged students to return their solutions with a report on their progress in reading, including a list of the books they consulted, and any questions regarding difficulties they may have encountered. During the week he looked over the papers and returned them with comments while the students read arithmetic books and prepared for the next set of questions. We describe his correspondence with students throughout the class. His letters to them elucidate his educational philosophy and include tips on how to prepare for the examination. We include a selection of questions on the arithmetic examination.

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