962-Q1-97 Edward Sandifer* (esandifer@earthlink.net), 3 Juniper Road, Newtown, CT 06470. Euler's Fourteen Problems.

In 1757, Euler presented 14 unsolved "Quaestiones Mathematicae" and 18 "Quaestiones Physicae" to the St. Petersburg Academy. The problems seem to be intended both to guide the research of the Academy and to provide problems for the Academy's prize. The parallels with the Hilbert Problems are inescapable. The problems provide a glimpse of what Euler thought were the important problems of his day, and also into what he thought was the nature and purpose of mathematics itself. (Received July 31, 2000)