

1067-01-1575

Jacqueline Feke* (jfeke@stanford.edu), Introduction to the Humanities, 590 Escondido Mall, Sweet Hall, Second Floor, Stanford, CA 94305. *Ptolemy's justification for the study of mathematics.*

Why study mathematics? For Ptolemy, the second-century mathematician, the answer was simple: mathematics has the most ethical benefits of any area of study. By analyzing the mathematical forms and movements of celestial bodies, for instance, the individual attains a virtuous state in the soul. He becomes a lover of the stars and planets' divine beauty and, as a result, he is able to transform his soul into a state resembling the divine constancy, good order, symmetry, and calm. Ptolemy makes this claim in the introduction to the *Almagest*, his great compendium of astronomical hypotheses. This claim descends from a centuries-long tradition, promulgated by Plato's *Timaeus*. Ptolemy breaks with the ancient philosophical tradition, however, by elevating mathematics above every other science. According to Ptolemy's *Almagest*, mathematics is ethically, epistemologically, and practically the highest area of inquiry. Hence, this paper will explore Ptolemy's multifaceted justification for studying mathematics. (Received September 21, 2010)