

Abstract Submitted  
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**A Question of Gravity: Forces from the Planets** WILLIAM MENDOZA, Florida State College at Jacksonville — The question of gravitational forces from the major celestial bodies of the Solar system will be considered in the context of a question posed in an introductory calculus-based physics course: is the gravitational force between obstetrician and infant at one meter of separation truly greater than that of any planet in the Earth-Sun system? Nearly all of the major celestial bodies will be quantitatively considered including the largest asteroids and planetary moons. The range of force from each body will be reported based on separation distances, and geometric considerations from the plane of the orbit. In addition to consideration of the central force issue, the tidal forces from the celestial bodies will also be quantitatively described and tabulated.

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