Astronomy Ranking Task:  
Gravity

Exercise #7

**Description:** The figure below shows two identical asteroids located very near one another but moving in an orbit that keeps them from colliding.

![Diagram of asteroids](image)

**Ranking Instructions:** Rank (from greatest to least) the net (or total) gravitational force that would be exerted on an astronaut if he/she were standing on the asteroids at the various locations (A – D).

**Ranking Order:** Greatest 1 ______ 2 ______ 3 ______ 4 ______ Least

Or, the net force exerted on the astronaut would be the same at each location. __________
(indicate with a check mark)

**Carefully explain** your reasoning for ranking this way:

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