## 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.


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 ( $\mathrm{A}-\mathrm{D}$ ).

Ranking Order: Greatest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ Least

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

Carefully explain your reasoning for ranking this way:

