Astronomy Ranking Task:
Kepler’s Laws – Orbital Motion

Exercise #2

Description: The figure below shows four locations (A – D) of an asteroid during its elliptical orbit around the Sun.

![Diagram of an asteroid's elliptical orbit](image)

Ranking Instructions: Rank the speed (from fastest to slowest) that the asteroid would have at each of the four locations.

Ranking Order: Fastest 1 ___ 2 ____ 3 ____ 4 ____ Slowest

Or, the orbital speed at each location would be the same. _________ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

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