

Astronomy Ranking Task: Gravity

Exercise #6

Description: The table below shows the masses and distances (expressed in arbitrary units) between four different pairs of stars (Cases A – D).

Case	<i>Mass of star #1</i>	Distance between star #1 and star #2	<i>Mass of star #2</i>
A	4	2	2
B	2	2	8
C	8	4	4
D	1	3	5

Ranking Instructions: Rank (from greatest to least) the strength of the gravitational force exerted between the pairs of stars in cases A - D.

Ranking Order: Greatest 1 _____ 2 _____ 3 _____ 4 _____ Least

Or, the strength of the gravitational force exerted between each pair of stars is the same.
_____ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
