## Astronomy Ranking Task: Gravity

## Exercise \#2

Description: The figures below ( $\mathrm{A}-\mathrm{E}$ ) each show two rocky asteroids with masses (m), expressed in arbitrary units, separated by a distance (d), also expressed in arbitrary units.


$$
\mathrm{m}=20
$$

A. Ranking Instructions: Rank (from greatest to least) the strength of the gravitational force exerted on the asteroid located on the left side of each pair.

Ranking Order: Greatest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ Least

Or, the strength of the gravitational force exerted in each case is the same. $\qquad$ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
$\qquad$
$\qquad$
$\qquad$
B. Ranking Instructions: Rank (from greatest to least) the strength of the gravitational force exerted on the asteroid located on the right side of each pair.

Ranking Order: Greatest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ Least

Or, the strength of the gravitational force exerted in each case is the same. $\qquad$ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
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$\qquad$
$\qquad$
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