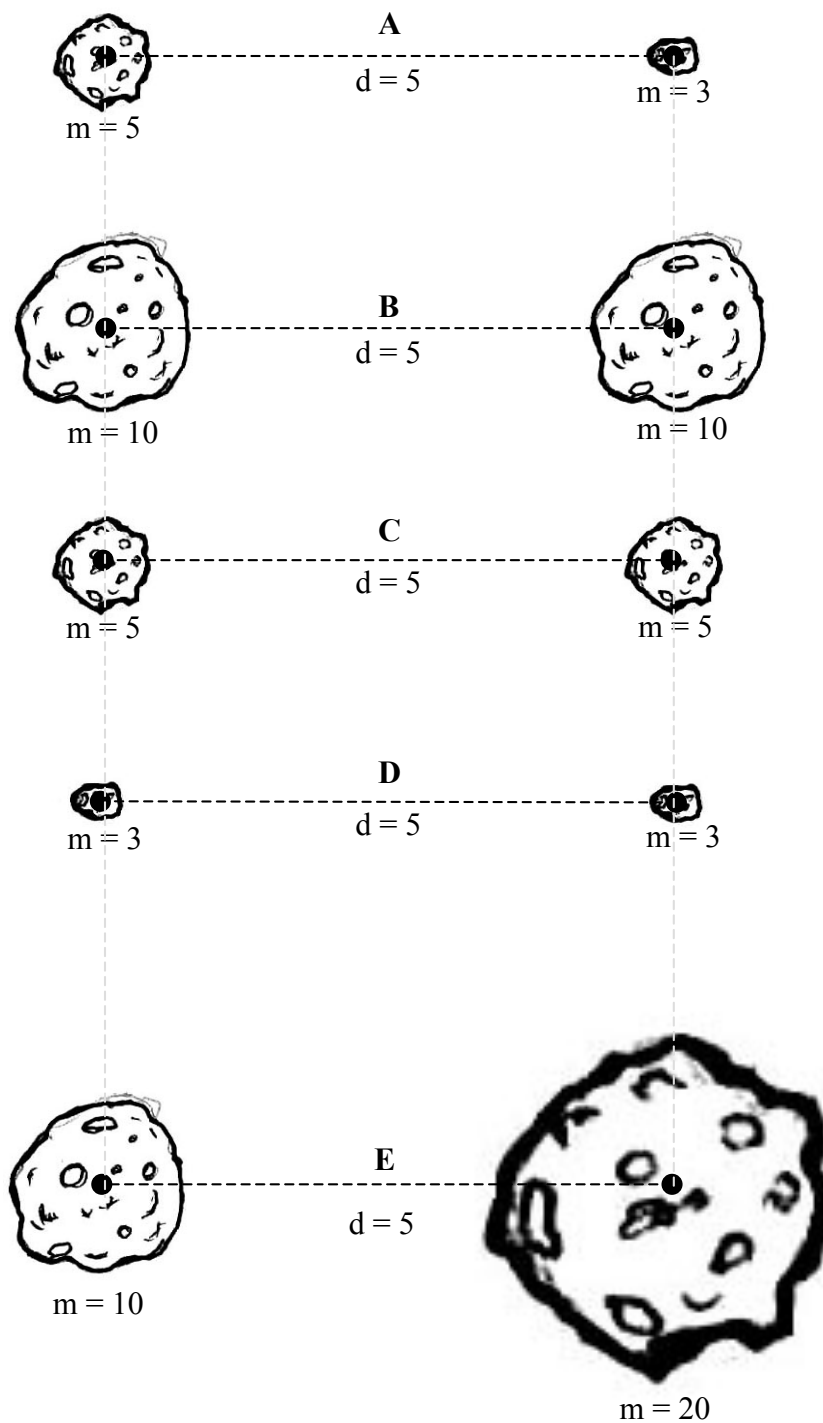


# Astronomy Ranking Task: Gravity

## Exercise #2

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



**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 \_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 \_\_\_\_ 5 \_\_\_\_ Least

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

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

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**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 \_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 \_\_\_\_ 5 \_\_\_\_ Least

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

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

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