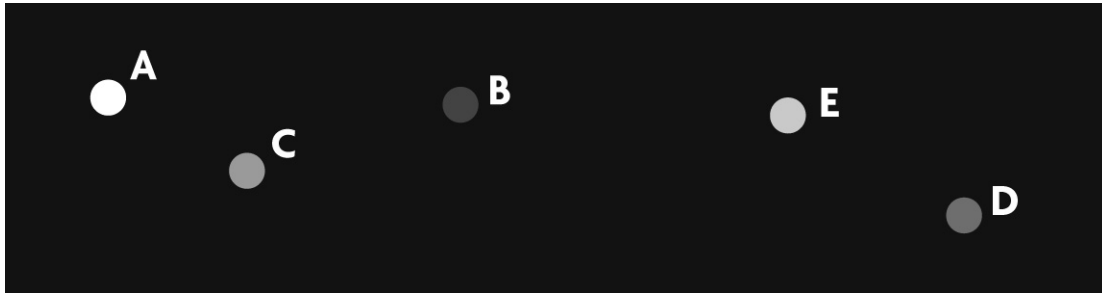


Astronomy Ranking Task: Apparent and Absolute Magnitude

Exercise #2

Description: The figure below shows five stars (A - E) as they appear in the night sky from Earth. A darker shading is used to indicate the appearance of a dimmer star. Note that star B is shown the darkest, followed by D, C, E, and A.



A. Ranking Instructions: Rank the brightness (from greatest to least) of each star as it appears in the night sky.

Ranking Order: Greatest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ Least

Or, the brightness of each star would appear the same. _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

B. Ranking Instructions: Rank the numerical value (from greatest to least) for each star's apparent magnitude.

Ranking Order: Greatest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ Least

Or, the apparent magnitude number would be the same for each star. _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

C. Ranking Instructions: Rank the distance (from greatest to least) of each star from Earth.

Ranking Order: Greatest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ Least

Or, the distance from Earth cannot be determined from this information. _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:
