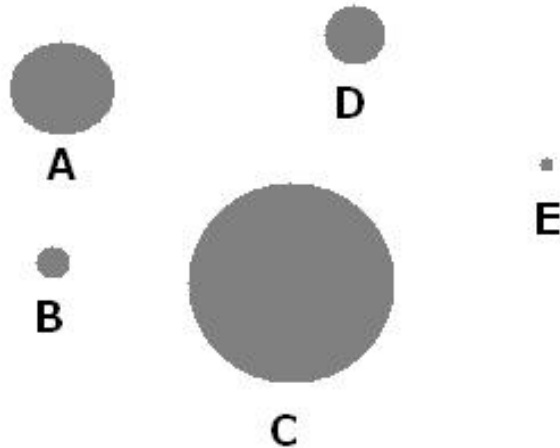


Astronomy Ranking Task: Stellar Evolution

Exercise #1

Description: The figures below show main sequence stars of various sizes .



A) Ranking Instructions: Rank, from least to most, the mass of the stars:

Least 1____, 2____, 3____ 4____, 5____ Most

All the stars would have the same mass: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

B) Ranking Instructions: Rank, form hottest to coolest, the temperature of the stars:

Hottest 1____, 2____, 3____ 4____, 5____ Coolest

All the stars would have the same temperature: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

C) Ranking Instructions: Rank, from greatest to least, the luminosity of the stars:

Greatest 1 ____, 2 ____, 3 ____, 4 ____, 5 ____ **Least**

All the stars would have the same luminosity: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

D) Ranking Instructions: Rank, from longest to shortest, the total main sequence lifetime of the stars:

Longest 1 ____, 2 ____, 3 ____, 4 ____, 5 ____ **Shortest**

All the stars would have the same main sequence lifetime: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:
