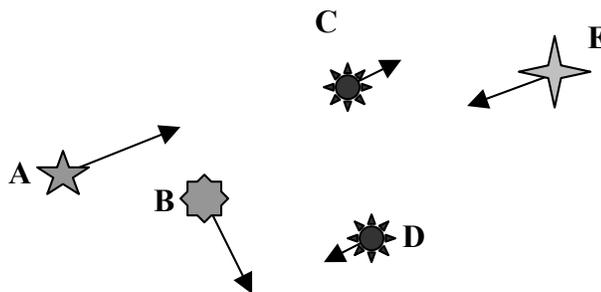


# Astronomy Ranking Task: Doppler Shift

## Exercise #2

**Description:** The figure below shows the motion of five distant stars (A - E) relative to a stationary observer (telescope). The speed and direction of each star is indicated by the length and direction of the arrows shown.



**Observer**

**Distant Stars**

**Ranking Instructions:** Rank the Doppler shift of the light observed from each star (A – E) from greatest “blueshift”, through no shift, to greatest “redshift”.

**Ranking Order:**

Greatest blueshift 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ Greatest redshift

Or, the Doppler shift for each star is the same. \_\_\_\_\_ (indicate with check mark).

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

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