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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