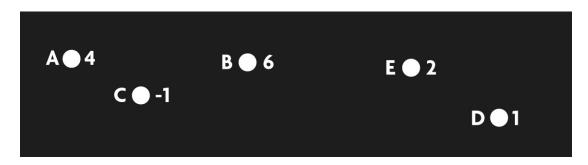
Astronomy Ranking Task: Apparent and Absolute Magnitude

Exercise #3

Description: The figure below shows five stars (A - E) as they appear in the night sky from Earth. The absolute magnitude number is also provided to the right of each star. Note that all the stars are shown with the same shading to indicate how they would appear in the sky.



Α.	Ranking Instappears in the		nk the brig	ghtness (fro	om greatest	to least) of	feach star (A – I	E) as it		
Ra	nking Order:	Greatest 1_	2_	3 _	4	5	Least			
Or, the brightness of each star appears the same (indicate with check mark).										
Ca	refully explain	n your reasoni	ng for rar	nking this v	way:					
В.	_	ructions: Rai	nk the abs	solute mag	nitude numl	per (from g	greatest to least)	of each		
	star(A - E).									
Ra	nking Order:	Greatest 1_	2_	3 _	4	5	Least			
	, the absolute nark).	nagnitude nun	nber of ea	ch star wo	uld be the sa	ame	(indicate wit	th check		
Ca	refully explain	n your reasoni	ng for rar	nking this v	way:					

C. Ranking Instructions: Rank each star (A – E).	the total	amount of	energy (from grea	ntest to least) given off	e by
Ranking Order: Greatest 1	2	3	4	5_	Least	
Or, the total amount of energy give check mark).	en off by	each star	would be	the same	e (indicate wi	th
Carefully explain your reasoning	for ranki	ng this wa	ıy:			
D. Ranking Instructions: Rank Earth.	the distar	nce (from	farthest t	o closest)	of each star (A – E) fi	rom
Ranking Order: Farthest 1	_ 2	_ 3	4	5	Closest	
Or, the distance from Earth to each	n star is tl	ne same.	(1	indicate v	vith check mark).	
Carefully explain your reasoning	for ranki	ng this wa	ıy:			