Astronomy Ranking Task:
Parallax and Distance

Exercise #1:

**Description:** The table below provides a partial list of the parallax angles (in arcseconds) and distances (in parsecs) for five stars.

<table>
<thead>
<tr>
<th>STAR</th>
<th>PARALLAX ANGLE (arcseconds)</th>
<th>DISTANCE FROM EARTH (parsecs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

A. **Ranking Instructions:** Use the provided information to rank the parallax angle (from largest to smallest) of the stars (A-E) as observed from Earth. Note that it is not necessary, but may be helpful, to complete the table before making your rankings.

**Ranking Order:** Largest parallax 1 2 3 4 5 Smallest parallax

Or, the parallax angle for each of the stars would all be the same. _______ (indicate with a check mark).

Carefully explain your reasoning for ranking this way:

______________________________________________________________________________
______________________________________________________________________________
_____________________

B. **Ranking Instructions:** Use the provided information to rank the distance (from farthest to nearest) of the stars (A-E) from Earth. Note that it is not necessary, but may be helpful, to complete the table before making your rankings.

**Ranking Order:** Largest distance 1 2 3 4 5 Smallest distance

Or, the distance to each of the stars would all be the same. _______ (indicate with a check mark).

Carefully explain your reasoning for ranking this way:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________