## Question 1

Stars and other celestial objects trace out circular paths in the night sky. Two people make the statements:

**Barbie:** The stars are fixed and the Earth moves.

**Ken:** The Earth is fixed and the stars move.

Based *only on the observed circular paths,* which of the following is true?

- 1. Barbie could be correct, Ken could be correct.
- 2. Barbie could **not** be correct, Ken could be correct.
- 3. Barbie could be correct, Ken could **not** be correct.
- 4. Barbie could **not** be correct, Ken could **not** be correct.