30 August 2023 Phys 100 Fall 2023

Question 1

Consider Venus in two possible solar system models:

Geocentric: Earth at center, Venus orbits in a circle at a steady rate.

Heliocentric: Sun at center, Venus, Earth orbit in a circles at different steady rates.

Which of the following is true about the apparent size of Venus as observed from Earth as time passes?

- 1. Varies in geocentric model, stays same in heliocentric model.
- 2. Varies in heliocentric model, stays same in geocentric model.
- 3. Stays same in both models.
- 4. Varies in both models.