
Exercise D2: Comets and Meteors

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: What is the major difference between asteroid and comet orbits?

- a. Comet orbits are more elliptical than asteroid orbits.
- b. Comet orbits tend to be closer to the plane of the ecliptic than asteroid orbits.
- c. Comet orbits have their aphelion closer to the Sun than asteroid orbits.
- d. Comet orbits are more stable than asteroid orbits.

Question 2: Assuming no major changes to its orbit, what will the orbital period of Halley's comet be after 2020?

- a. 38 years
- b. 65 years
- c. 76 years
- d. 152 years

Question 3: How does the semi-major axis of Halley's orbit compare to the Earth's distance from the Sun? *Hint: Use the **Angular Separation Tool** and the diagram below to help you to answer this question.*

- a. It is about the same.
- b. It is 18 times larger.
- c. It is 36 times larger.
- d. It is 72 times larger.

Question 4: What is the approximate date of the Eta Aquarid meteor shower?

- a. Early May
- b. Mid-October
- c. Mid-April
- d. Late May