
Exercise B3: Johannes Kepler and Elliptical Orbits

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: What is the length of the major axis of Mars' orbit?

- a. 0.285 AU
- b. 1.381 AU
- c. 1.666 AU
- d. 3.047 AU

Question 2: What is the sidereal period of Mars using Kepler's Third Law?

- a. 0.15 years
- b. 1.88 years
- c. 2.14 years
- d. 5.32 years

Question 3: On average, how far would Mars have to be from the Sun to have an orbital period of 10 years?

- a. 0.15 AU
- b. 1.88 AU
- c. 2.14 AU
- d. 4.64 AU