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: At what distance would a planet have to orbit the Sun on average in order to have a sidereal period of 10 years?

☐ **a.** 0.15 AU

☐ **b.** 1.88 AU

☐ **c.** 2.14 AU

☐ **d.** 4.64 AU