
Exercise D1: Asteroids of the Main Belt

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: What is the perihelion distance of Vesta?

- a. 2.15 AU
- b. 0.42 AU
- c. 2.36 AU
- d. 2.57 AU

Question 2: Why is Vesta not classified as a dwarf planet in the new classification scheme?

- a. It is not spherical.
- b. It is too close to the Sun.
- c. There is already one dwarf planet in the asteroid belt.
- d. It is not dense enough.

Question 3: Which of the following statements is NOT true in describing the orbits and locations of these particular main belt asteroids?

- a. They all have elliptical orbits.
- b. Their mean distances from the Sun are all less than that of Jupiter.
- c. Their orbits take them closer to Mars' orbit than to Jupiter's orbit.
- d. Their orbits occasionally carry them into Jupiter's orbit.

Question 4: Which of the following statements best describes the general orbital characteristics of the asteroids?

- a. Many asteroids orbit the Sun near the plane of the ecliptic.
- b. Asteroids can have elliptical orbits.
- c. Asteroid orbits can be highly inclined to the plane of the ecliptic.
- d. All of the above.

