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.