
Exercise C3: Direct and Retrograde Motion of the Planets

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: The reason why Jupiter's direct motion is slower than that of Mars is because

- a. Jupiter is much more massive than Mars.
- b. Jupiter is further away from the Sun than Mars.
- c. Jupiter's orbit is closer to the plane of the ecliptic than is the orbit of Mars.
- d. We are watching this motion from our terrestrial viewpoint.

Question 2: Which statement best describes the motions of Jupiter and Saturn?

- a. They move continuously eastward, but at variable rates as time progresses.
- b. They always appear to move westward against the background stars because of the Earth's rotation.
- c. They move mostly eastward but occasionally reverse this direction to move westward for a while.
- d. They move mostly westward but occasionally reverse their motion and move eastward for a while.

Question 3: What is the approximate value of F_J / F_N ?

- a. 662
- b. 1.94
- c. 111
- d. 35.8