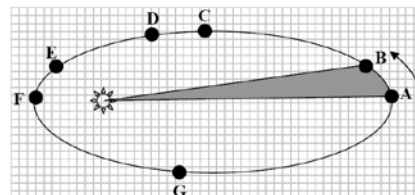


The following are example test questions. The red circles are the student's original (incorrect) answers.

**Example Test Questions**

24. In the figure at right, the motion of a planet traveling around a star is shown. The shaded area was swept out as the planet traveled from position A to position B. Between which two other indicated positions would the planet sweep out another area such that the motion obeys Kepler's second law?



- a. B and C
- b. C and D
- c. E and F
- d. F and G

35. Imagine that you throw a ball directly upward. Which of the following statements best describes how Newton's second law accounts for the motion of the ball when it reaches its maximum height?

- a. The ball has a velocity that is zero and an acceleration that is zero.
- b. The ball has a velocity that is upward and an acceleration that is downward.
- c. The ball has a net force that is downward and an acceleration that is downward.
- d. The ball has a net force that is downward and a velocity that is downward.
- e. The ball has a net force that is downward and an acceleration of zero.

47. Who is responsible for the three laws governing the motions of all bodies in the universe?

- a. Copernicus
- b. Brahe
- c. Kepler
- d. Galileo
- e. Newton