

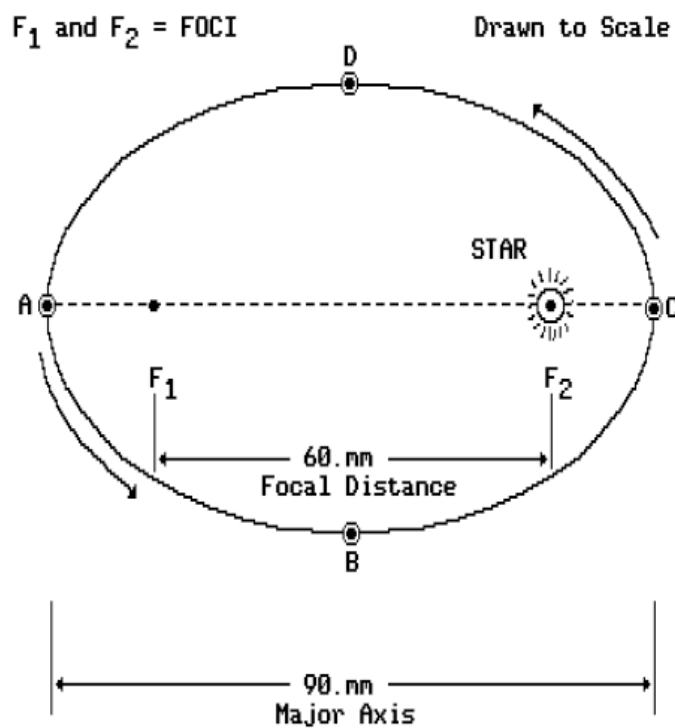
Name: _____

Date: _____ Period: _____

Worksheet: Actual Motions II

- The actual shape of the Earth's orbit around the Sun is best described as
 - a slightly eccentric ellipse
 - an oblate spheroid
 - a perfect circle
 - a very eccentric ellipse
- What is the eccentricity of an orbit having a major axis length of 100 million miles and a focal distance of 10 million miles?
 - 1.0
 - 0.01
 - 10.0
 - 0.1

The diagram below is a model of the orbit of an imaginary planet Q around a star. Points A, B, C, and D indicate four orbital positions of the planet Q.

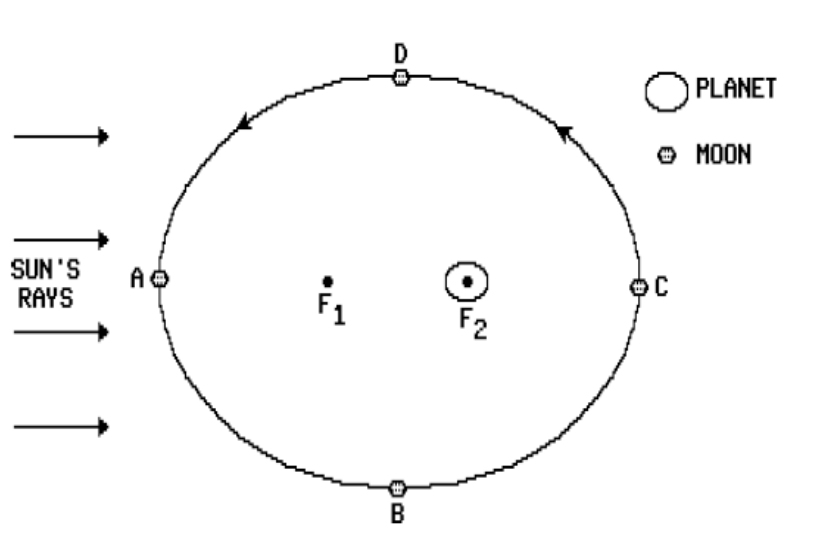


- What is the approximate eccentricity of planet Q's orbit?
 - 0.67
 - 1.50
 - 0.15
 - 0.06

Worksheet: Actual Motions II

4. According to the Earth Science Reference Tables, which planet has the most eccentric orbit?
- Pluto
 - Mars
 - Venus
 - Saturn

The diagram below represents a model of the orbit of a moon around a planet. Points A, B, C, and D indicate four positions of the moon in its orbit. Points F1 and F2 are focal points of the orbit.



5. If the distance from F₁ to F₂ is 42,000 kilometers and the distance from A to C is 768,000 kilometers, what is the eccentricity of the moon's orbit?
- 0.055
 - 0.81
 - 0.94
 - 0.18
6. Which diagram best represents a heliocentric model of a portion of the solar system? [Diagrams are not drawn to scale.] KEY: E = Earth; P = Planet; S = Sun

