

A synchronous Activity 1.1

4. a) distance = 91 (right) 946 miles b.) 94,520 miles (left)

NO, the distance to the left is larger.

5. If the orbit was perfectly circular the distance would be 94520 miles

2. When gravity deactivates the planet goes off the circular path.

3. It will change the path and gravity will increase and decrease depending how far and close to the star.

4. By changing velocity, it will change the speed and depending on the speed it will move the planet fast or slow and can change the direction of the path.

2. Changing the mass will disrupt the even path, and the planet will go off the path.

Yes, the larger the mass the faster it will accelerate downward because of gravity.

Yes, depending on the mass of a planet it will have a certain amount of gravity.

3.
$$\text{Area} = \frac{bh}{2}$$
 where $b = 21646 \times 36300$

area is ≈ 393673500 .

Due to Kepler's 2nd law the planet will have equal swept out areas in an ellipse.