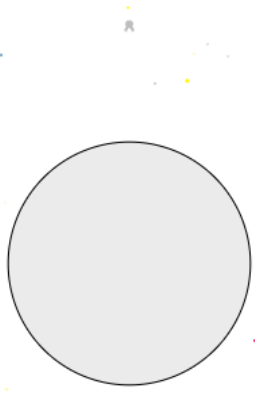


Mass of a Planet

Step 1: In the picture below show the values of all the variables for your problem including the time it took the satellite to make one orbit of the planet. Then in the region to the right of the picture, calculate the circumference of the orbit and the speed of the satellite in orbit. Show all the steps of these calculations neatly in the provided space



Step 2: Now find the acceleration of the satellite and show your calculation below

Step 3: Use Newton's second law, the mass of the satellite and the acceleration that you just calculated, find the force of gravity on the satellite.

Step 4: Now you are to find the mass of the planet using the force you calculated in step 3. Enter your answers into the program to make sure you did everything correctly.