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Question 1

1.1) Starting by defining the function in terms of seconds. In the next line by the return command I'll simply divide the defined function by 60. Select an arbitrary value as seconds. Print the answer in terms of min.

1.2) Straight forward, let define the function in terms of au. By the return command, simply multiply the functions by 149598073. Select an arbitrary value as au. Print the answer in terms of km.

1.3) Start by defining the function in terms of age. Return the function multiplied by 60*60*365. Select an arbitrary value as the age. Print the answer in terms of seconds.

1.4) Defining the function is the first step. In the return command add the len function to get the length of a string

Question 2

2.1) Start of by import the necessary libraries. Next step is to define the function. Use the return command and numpy to compute the function. Select an arbitrary value for x. Print the answer. Next set x equal to a array using numpy. Print the answer.

2.2) Same procedure as 2.1)

Question 3

For question 3, I'm gonna create a calculator that can be used to get the angular speed. In this calculator we are going to use Uniform Circular Motion. It's a simple calculator where you only need the radius and period. Start by defining the function in terms of radius, r, and the period, T. Using the return command we can calculate and print the speed.

Question 4

For this question we will make use of newtons method. First off we will select an initial x point. From there we will find a linear equation that's tangents passes through f(x selected). Next we will find the x-intercept of the linear equation, the x-intercept then becomes our second x point. Then the whole process repeats itself