Python for physicists - exercise 3

Submission instructions - please read carefully:
• To be submitted by *** in the moodle (Lemida) system.
• *** files with py suffixes must be submitted - named exactly as detailed below for each exercise.
That is to say that:
• Do not submit complete projects, libraries, zip files, etc., and do not submit all exercises in one file, but in separate files with the names listed below.
• Make sure that the files run and do what is needed (on a recent version of Python, 3.5 or higher).
• Use only the commands we learned in the practice.

Exercise 1. Submit it as file name: ex03-01.py

Write a program that receives numbers from the user in the following way (assume that they are integer):

Please enter a number:

Continue to display the message and receive more numbers until the user enters a number that is not positive.
At the end of the run, the sum of all the prime numbers entered by the user must be printed to the screen.

Example:

Please enter a number: 7
Please enter a number: 14
Please enter a number: 19
Please enter a number: 0

Result = 26

Exercise 2. Submit it as file name: ex03-02.py

Write a program that receives two numbers from the user (assume that they are integer and positive):

Please enter the first number:
Please enter the second number:

and prints the least common multiple (LCM) of the two numbers. (If you think about both numbers that you received as denominators of fractions, then the least common multiple is the common denominator.)

Example:

Please enter the first number: 8
Please enter the second number: 6
Result = 24

Another example:

Please enter the first number: 8
Please enter the second number: 7
Result = 56

Exercise 3. Submit it as file name: ex03-03.py

Three planets revolve around a star. The times it takes them to complete a full surround are a, b, c (in some unit of time). Assume that a, b, c are integers. At time t = 0, the planets are in one straight line.
Write a program that receives c, b, a from the user and prints the first time at which the planets will again be on one straight line.

Example:

Enter a: 2
Enter b: 7
Enter c: 12
Result = 84

Hint: Generalize what you did in exercise 2, i.e. write a function that finds the least common multiple (LCM) of 3 numbers.