# Homework: Math for Developers

This document defines homework assignments from the [“C# Basics“ Course @ Software University](http://softuni.bg/courses/csharp-basics/). Please submit as homework a single txt/doc/docx file holding the answers of all below described problems.

## Some Primes

Find the 24th, 101st and 251st prime number.

24🡪89, 101🡪547 , 251🡪1583

## Some Fibonacci Primes

Check if the 24th, 101st and 251st prime numbers are part of the base Fibonacci number set. What is their position?

89-yes(12), 547-No, 1583-No

## Some Factorials

Find 100!, 171! and 250! Give all digits.

9.332622e+157, 1.24101807 E+309, 3.23285626 E+492

## Calculate Hypotenuse

You are given three right angled triangles. Find the length of their hypotenuses.

1. Catheti: 3 and 4 -🡪5
2. Catheti: 10 and 12-🡪 **15.6204993518**
3. Catheti 100 and 250-🡪 **269.258240357**

## Numeral System Conversions

Convert 1234d to binary and hexadecimal numeral systems.---🡪bin—10011010010,hex----4D2

Convert 1100101b to decimal and hexadecimal numeral systems.--🡪dec---101, hex---10C945

Convert ABChex to decimal and binary numeral systems.-🡪dec---2748, bin---101010111100

## Least Common Multiple

Find LCM(1234, 3456).

The LCM is: **2132352**