**Problem 1: Some Primes**

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

89, 547 and 1597

**Problem 2: 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 (n11); 547 – no; 1597 – yes (n17)

**Problem 3: Some Factorials**

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

100! 93326215443944152681699238856266700490715968264381621468592963895217599993229915608941463976156518286253697920827223758251185210916864000000000000000000000000

171! 1241018070217667823424840524103103992616605577501693185388951803611996075221691752992751978120487585576464959501670387052809889858690710767331242032218484364310473577889968548278290754541561964852153468318044293239598173696899657235903947616152278558180061176365108428800000000000000000000000000000000000000000

250! 3232856260909107732320814552024368470994843717673780666747942427112823747555111209488817915371028199450928507353189432926730931712808990822791030279071281921676527240189264733218041186261006832925365133678939089569935713530175040513178760077247933065402339006164825552248819436572586057399222641254832982204849137721776650641276858807153128978777672951913990844377478702589172973255150283241787320658188482062478582659808848825548800000000000000000000000000000000000000000000000000000000000000

**Problem 4: Calculate Hypotenuse**

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

*1. Catheti: 3 and 4*

*2. Catheti: 10 and 12*

*3. Catheti 100 and 250*

5; 16,52; 269,26

**Problem 5: Numeral System Conversions**

* *Convert 1234d to binary and hexadecimal numeral systems.*
* *Convert 1100101b to decimal and hexadecimal numeral systems.*
* *Convert ABChex to decimal and binary numeral systems.*

10011010010; 4D2

101; 65

17112; 100001011011000

**Problem 6: Least Common Multiple**

* Find LCM(1234, 3456).

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