

Computations from the paper:  
***Concatenatinos of Terms of an Arithmetic Progressions***

Florian Luca, Bertrand Teguia Tabuguia  
 University of the Witswatersrands, Juhannesburg  
 Department of Computer Science, University of Oxford

**Sm vs sm**

> restart

> with(Smarandache) :

> with(CodeTools) :

> sm := n → parse(cat( '\$'(n + 1) ))

*sm := n ↦ parse(cat( '\$'(n + 1) ))*

(1)

> L := [seq( 10<sup>l</sup> - 1, l = 5 .. 8 )] :

> t, vsm1 := CPUTime(sm(L[1])) : t

0.079

(2)

> t, vSm1 := CPUTime(Sm(L[1])) : t

0.046

(3)

> vSm1 - vsm1

0

(4)

> t, vsm2 := CPUTime(sm(L[2])) : t

0.719

(5)

> t, vSm2 := CPUTime(Sm(L[2])) : t

0.125

(6)

> vSm2 - vsm2

0

(7)

> t, vsm3 := CPUTime(sm(L[3])) : t

10.969

(8)

> t, vSm3 := CPUTime(Sm(L[3])) : t

1.766

(9)

> vSm3 - vsm3

0

(10)

> t, vsm4 := CPUTime(sm(L[4])) : t

208.391

(11)

> t, vSm4 := CPUTime(Sm(L[4])) : t

31.532

(12)

> vSm4 - vsm4

(13)

**(13)**