

Atomic Number Equation Based on Larson's Triplets

David Halprin

Where Z represents the Atomic Number, and (a, b, c) is the number triplet representing the atoms:

$$Z+2 = \frac{a(a-1)(2a-1) + b(b+1)(2b+1)}{3} + c \quad (1)$$

If $a = b$ then this reduces to

$$Z+2 = \frac{2b(2b^2+1)}{3} + c \quad (2)$$

If $a = b + 1$ then it reduces to

$$Z+2 = \frac{2b(b+1)(2b+1)}{3} + c \quad (3)$$

a=b		a = b+1		Range of c	Z	Range of Z
a	b	a	b			
		2	1	-1 to 4	c + 2	1 to 6
2	2			-4 to 4	c + 10	6 to 14
		3	2	-4 to 9	c + 18	14 to 27
3	3			-8 to 9	c + 36	28 to 45
		4	3	-8 to 16	c + 54	46 to 70
4	4			-15 to 16	c + 86	71 to 102
		5	4	-15 to -1	c + 118	103 to 117

Equation (1) is exactly representative of Dewey's algorithm.

Equations (2) and (3) are just simplifications of Equation (1) when $a = b$ and $a = b + 1$ respectively.

Some specific examples:

Larsonium¹ 5-4-(1) substituted into Equation (3) gives $Z = 117$ as expected, however there is an interesting aside to consider, despite its counter-intuitive appearance and it requires some interpretation within RS too.

¹ Not an "official" name for the element; also identified as *Farnsium* in *Futurama* episode, "Near-Death Wish."

Atom / Particle	Atomic Number	
	a-b-c	Z
	0-0-(1)	-3
Electron	1-0-(1)	-3
Rotational base	1-0-0	-2
	0-0-0	-2
	0-0-1	-1
Positron	1-0-1	-1
Neutrino	1-1-(1)	-1
Neutron	1-1-0	0
Deuteron	1-1-0	0
Alpha Particle	1-1-0	0
Deuterium	1-1-1	1