Smarandache's Quantum Chromodynamics Formula:

In order to save the colorless combinations prevailed in the Theory of Quantum Chromodynamics (QCD) of quarks and antiquarks in their combinations when binding, we devise the following formula:

$$\mathbf{Q - A} \in \pm \boldsymbol{M}\mathbf{3} \tag{1}$$

where $M3$ means multiple of three,
i.e. $\pm M3 = \{3 \cdot k \mid k \in Z\} = \{\ldots, -12, -9, -6, -3, 0, 3, 6, 9, 12, \ldots\}$,
and Q = number of quarks, A = number of antiquarks.
But (1) is equivalent to:

$$\mathbf{Q \equiv A \ (mod\ 3)} \tag{2}$$

(Q is congruent to A modulo 3).

To justify this formula we mention that 3 quarks form a colorless combination, and any multiple of three (***M*3**) combination of quarks too, i.e. 6, 9, 12, etc. quarks. In a similar way, 3 antiquarks form a colorless combination, and any multiple of three (***M*3**) combination of antiquarks too, i.e. 6, 9, 12, etc. antiquarks. Hence, when we have hybrid combinations of quarks and antiquarks, a quark and an antiquark will annihilate their colors and, therefore, what's left should be a multiple of three number of quarks (in the case when the number of quarks is bigger, and the difference in the formula is positive), or a multiple of three number of antiquarks (in the case when the number of antiquarks is bigger, and the difference in the formula is negative).

Quark-Antiquark Combinations.
Let's note by q = quark $\in$ {Up, Down, Top, Bottom, Strange, Charm},
and by a = antiquark $\in$ {Up^, Down^, Top^, Bottom^, Strange^, Charm^}.
Hence, for combinations of n quarks and antiquarks, $n \geq 2$, prevailing the colorless, we have the following possibilities:
- if n = 2, we have: qa (biquark – for example the mesons and antimessons);
- if n = 3, we have qqq, aaa (triquark – for example the baryons and antibaryons);
- if n = 4, we have qqaa (tetraquark);
- if n = 5, we have qqqqa, aaaaq (pentaquark);
- if n = 6, we have qqqaaa, qqqqqq, aaaaaa (hexaquark);
- if n = 7, we have qqqqqaa, qqaaaaa (septiquark);
- if n = 8, we have qqqqaaaa, qqqqqqaa, qqaaaaaa (octoquark);
- if n = 9, we have qqqqqqqqq, qqqqqqaaa, qqqaaaaaa, aaaaaaaaa (nonaquark);
- if n = 10, we have qqqqqaaaaa, qqqqqqqqaa, qqaaaaaaaa (decaquark);

etc.