Quantum Mathematics and the Standard Model of Physics Part Six:
"Seeing Functions as Interactions"

In this Standard Model of Physics themed chapter, we will be working with the '(+/-) Sibling Functions' (individually), in an attempt to gain a better understanding of these two Functions. In the first section of this chapter, we will utilize the 'Subtraction Function', in order to separate each of the 'Base Numbers' into pairs of Lesser 'Base Numbers'. This Subtraction will cause a separation, with this separation yielding a subtrahend and a difference which maintain Conservation, in that they could be Added together to yield the original Number. For example, if we take the Number 5, and Subtract the Number 2, we are left with the difference of 3 as well as the subtrahend of 2, with these two Numbers maintaining Conservation, in that they could be Added together into the original minuend of 5 (as "2+3=5"). These differences and subtrahends are the pairs of Numbers which we will be working with throughout this section. (While the 'Subtraction Function' causes a separation which involves one Number dividing into two separate Numbers, this division of one Number into two Lesser Numbers does not involve the 'Quantum Mathematical' Function of Division.)

Since the Greater of the 'Base Numbers' allow for more options as to the specific values of the separated Numbers, we will start with the Greatest of the 'Base Numbers' (this being the 9, which is shown below) and work our way backwards through to the Least of the 'Base Numbers' (this being the 1). (Throughout this section, the 'Base Numbers' will all be highlighted in a Family Group color code, which will also function as a 'Color Charge' color code, as has been explained in previous Standard Model of Physics themed chapters.)

9
/ \
3 6
4 5
2 7
1 8

Above, we can see that the 9 can be separated into four unique pairs of Numbers, all of which involve an instance of Siblings, with this form of 'Sibling Mirroring' being due to the fact that in this example, the original Number (minuend) is the 'Self-Sibling/Cousin 9'. The basic behavior which is seen above is a good indicator of the behavior which will be displayed by the rest of the 'Base Numbers', in that the 'Blue Charged 9' can be separated into two Lesser 'Blue Charged Numbers' (these being the '3/6 Sibling/Cousins', both of which are highlighted in blue), or any of three pairs of Lesser 'Oppositionally Color Charged' Numbers. (To clarify, the term *'Oppositionally Color Charged' Numbers* in this case refers to any pair of Numbers which involves one 'Green Charged Number' and one 'Red Charged Number'.) These four options each involve a pair of 'Color Charges' which maintain Conservation, in that they could Add (or merge) together to yield the original 'Color Charge' (which in this case is a 'Blue Charge'). The topmost separation yields the '3/6 Sibling/Cousins', with these two Numbers maintaining 'Color Charge Conservation' due to the fact that " 'Blue Charge' + 'Blue Charge' = 'Blue Charge' ". While the remaining three separations involve the '4/5 Siblings', the '2/7 Siblings', and the 1/8 Sibling/Self-Cousins' (respectively), all of which maintain 'Color Charge Conservation' due to the fact that " 'Green Charge' + 'Red Charge' = 'Blue Charge' ". The differences and subtrahends which can be yielded from the fellow '3,6,9 Family Group' members (these being the 3 and the 6) all display this same form of 'Color Charge Conservation', while those which can be yielded from the other 'Base Numbers' (these being the 1,4,7 and 2,5,8 Family Group members) all display an alternate though similar form of 'Color Charge Conservation', all of which will be seen as we progress.

Next is the Greatest of the '2,5,8 Family Group' members, this being the 'Red Charged 8', which is shown below.

8
/ \
2 6
5 3
1 7
4 4

Above, we can see that the 'Red Charged 8' can be separated into either of its Lesser fellow Family Group members (these being the 2 and the 5, both of which possess a 'Red Charge'), each of which is paired up with one of the '3/6 Sibling/Cousins' (both of which possess a 'Blue Charge'). These pairs of Numbers each consist of one 'Red Charge' along with one 'Blue Charge', with these two 'Color Charges' maintaining Conservation, in that Adding them together again would yield the original 'Red Charge' (in that " 'Red Charge' + 'Blue Charge' = 'Red Charge' "). While the remaining two pairs of Lesser Numbers which the 8 can be separated into (these being 1/7 and 4/4) both involve two of the opposing 'Green Charges', with these dual 'Green Charges' maintaining 'Color Charge Conservation', in that Adding them together again would yield the original 'Red Charge' (as " 'Green Charge' + 'Green Charge' = 'Red Charge' ").

Next is the Greatest of the '1,4,7 Family Group' members, this being the 'Green Charged 7', which is shown below.

7
/ \
1 6
4 3
2 5

Above, we can see that the 'Green Charged 7' displays behavior which is similar to that which was seen in relation to the previous two 'Base Numbers', only with one less subtrahend/difference pair, which is due to the fact that there are less 'Base Numbers' into which the 7 can be separated. The 7 can be separated into pairs which involve either of its Lesser fellow Family Group members, each of which is paired up with one of the '3/6 Sibling/Cousins'. These two pairs both maintain 'Color Charge Conservation', in that " 'Green Charge' + 'Blue Charge' = 'Green Charge' ". While the only remaining option involves the 7 separating into the 2 and the 5, with this option also maintaining 'Color Charge Conservation', in that " 'Red Charge' + 'Red Charge' = 'Green Charge' ".

Next is the "Median" member of the '3,6,9 Family Group', this being the 'Blue Charged 6', which is shown below.

6
/ \
3 3
1 5
2 4

Above, we can see that the 'Blue Charged 6' displays behavior which is similar to that which was seen in relation to its Greater fellow Family Group member the 9, only with fewer options, which is due to the Lesser value of the 6 (as opposed to the 9). First, the 6 can be separated into two 'Blue Charged 3's', with these two 3's maintaining 'Color Charge Conservation', in that " 'Blue Charge' + 'Blue Charge' = 'Blue Charge' ". While the two remaining options (these being 1/5 and 2/4) both involve the 6 separating into 'Oppositionally Color Charged' Numbers, which means that these two options each maintain 'Color Charge Conservation', in that " 'Green Charge' + 'Red Charge' = 'Blue Charge' ".

Next is the Median member of the '2,5,8 Family Group', this being the 'Red Charged 5', which is shown below.

5
/ \
2 3
1 4

Above, we can see that the 'Red Charged 5' displays behavior which is similar to that which was seen in relation to its Greater fellow Family Group member the 8, in that the 'Red Charged 5' can be separated into a pair of Numbers which involves its Lesser fellow Family Group member (this being the 'Red Charged 2') along with the 'Blue Charged 3', with these two Numbers maintaining 'Color Charge Conservation', in that " 'Red Charge' + 'Blue Charge' = 'Red Charge' ". While the only remaining option involves the 'Red Charged 5' separating into two 'Green Charged Numbers' (these being the 1 and the 4), with these two Numbers also maintaining 'Color Charge Conservation', in that " 'Green Charge' + 'Green Charge' = 'Red Charge' ".

Next is the Median member of the '1,4,7 Family Group', this being the 'Green Charged 4', which is shown below.

4
/ \
1 3
2 2

Above, we can see that the 'Green Charged 4' displays behavior which is similar to that which was seen in relation to its Greater fellow Family Group member the 7, in that the 'Green Charged 4' can be separated into its Lesser fellow Family Group member (this being the 'Green Charged 1') along with the 'Blue Charged 3', with these two Numbers maintaining 'Color Charge Conservation', in that " 'Green Charge' + 'Blue Charge' = 'Green Charge' ". While the only remaining option involves the 'Green Charged 4' separating into two 'Red Charged 2's', with these two Numbers also maintaining 'Color Charge Conservation', in that " 'Red Charge' + 'Red Charge' = 'Green Charge' ".

Next is the Least of the '3,6,9 Family Group' members, this being the 'Blue Charged 3', which is shown below.

3
/ \
1 2

Above, we can see that the 'Blue Charged 3' displays behavior which is similar to that which was displayed in relation to its Greater fellow Family Group members, in that the 'Blue Charged 3' can be separated into a pair of 'Oppositionally Color Charged' Numbers (these being the 1 and the 2), with these two Numbers maintaining 'Color Charge Conservation', in that " 'Green Charge' + 'Red Charge' = 'Blue Charge' ". This is the only available option as to which Numbers the 'Blue Charged 3' can be separated into, which is due to the fact that the 3 is the Least member of its Family Group. (This will also be the case in relation to the 2 and the 1, which will be seen as we progress.)

Next is the Least of the '2,5,8 Family Group' members, this being the 'Red Charged 2', which is shown below.

2
/ \
1 1

Above, we can see that the 'Red Charged 2' displays behavior which is similar to that which was seen in relation to its Greater fellow Family Group members, in that the 'Red Charged 2' can be separated into two 'Green Charged 1's', with these two Numbers maintaining 'Color Charge Conservation', in that " 'Green Charge' + 'Green Charge' = 'Red Charge' ". (This is the only available option as to how the 'Red Charged 2' can be separated, which is due to the fact that the 2 is the Least member of its Family Group.)

Next is the Least of the '1,4,7 Family Group' members, this being the 'Green Charged 1', which is shown below.

1
/ \
.5(5) .5(5)

Above, we can see that the 'Green Charged 1' displays behavior which is similar to that which was seen in relation to its Greater fellow Family Group members, in that the 'Green Charged 1' can be separated into two instances of the non-repeating 'Decimal Number' .5, each of which condenses to a 'Red Charged 5'. These two condensed values maintain 'Color Charge Conservation', in that " 'Red Charge' + 'Red Charge' = 'Green Charge' ", which indicates that this 'Color Charge Conservation' also maintains in relation to 'Decimal Numbers'. (This is the only available option as to how the 'Green Charged 1' can be separated, which is due to the fact that the 1 is the Least member of its Family Group.)

Next, we will observe these same Functions as Interactions, which means that instead of working with 'Subtraction Functions', we will now be working with 'Subtractive Interactions', with these two concepts involving the same general concept. The semantic difference between these two concepts is that where a 'Subtraction Function' causes a separation, a 'Subtractive Interaction' involves a "Release" (with these two behaviors yielding the same overall result). In the first half of this section, we were working with 'Subtraction Functions' and separations, in order to indicate how 'Color Charge' is Conserved throughout each of the individual instances of separation. Though for the remainder of this chapter, we will be working with 'Subtractive Interactions', all of which will involve one Number Releasing another Number, in order to "Become" a new Number. This Released Number will be considered to be separate from, and lesser in import than the original Number, even when the value of the Released Number is Greater than the new Number which the original Number has now Become. (For example, in the arbitrary 'Subtractive Interaction' of "5-3=2", the 2 is the new Number, which is greater in terms of current level of import than the Released 3.)

We will start with the 9, which is shown below. (Throughout these examples, the new original Numbers (these being the differences) will be shown in the left column, while the Released Numbers (these being the subtrahends) will be shown in the right column. Also, these examples will all take into account the quality of Locality which is possesses by the 'Base Numbers' in relation to the 'Subtractive Interaction'. This is due to the fact that a 'Subtractive Interaction' which involves its minuend Releasing the Lesser of a pair of Numbers will yield a different result (in terms of the difference and the subtrahend) than the 'Subtractive Interaction' which involves the minuend Releasing the Greater of a pair of Numbers (this Locality was disregarded in the previous examples due to the fact that it is somewhat irrelevant in relation to the separation of one Number into two Numbers).)

```
    9
  /   \
8 ---> 1
7 ---> 2
6 ---> 3
5 ---> 4
4 ---> 5
3 ---> 6
2 ---> 7
1 ---> 8
```

Above, we can see that the leftmost vertical column contains a list of all of the new (post-Interaction) 'Base Numbers', each of which has Released its Sibling. These nine 'Subtractive Interactions' all maintain 'Color Charge Conservation', in that " 'Green Charge' + 'Red Charge' = 'Blue Charge' ", and " 'Blue Charge' + 'Blue Charge' = 'Blue Charge' ".

Next, we will examine the remaining members of the '3,6,9 Family Group', these being the '3/6 Sibling/Cousins', both of which are shown below.

```
    6            3
  /   \        /   \
5 ---> 1     2 ---> 1
4 ---> 2     1 ---> 2
3 ---> 3
2 ---> 4
1 ---> 5
```

Above, we can see that all seven of these individual 'Subtractive Interactions' maintain 'Color Charge Conservation'.

Next, we will examine the three '2,5,8 Family Group' members, all of which are shown below.

```
    8          5          2
  /   \      /   \      /   \
7 ---> 1   4 ---> 1   1 ---> 1
6 ---> 2   3 ---> 2
5 ---> 3   2 ---> 3
4 ---> 4   1 ---> 4
3 ---> 5
2 ---> 6
1 ---> 7
```

Above, we can see that all twelve of these individual 'Subtractive Interactions' maintain 'Color Charge Conservation'.

Next, we will examine the three '1,4,7 Family Group' members, all of which are shown below.

```
    7          4          1
  /   \      /   \      /   \
6 ---> 1   3 ---> 1   .5(5) .5(5)
5 ---> 2   2 ---> 2
4 ---> 3   1 ---> 3
3 ---> 4
2 ---> 5
1 ---> 6
```

Above, we can see that all ten of these individual 'Subtractive Interactions' maintain 'Color Charge Conservation'.

That brings the first section of this chapter to a close.

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In this section, we will examine one of the more important characteristics which was seen in the first section of this chapter (with this characteristic having also been seen throughout the previous chapters). This characteristic involves the fact that in order to Become a Lesser Family Group member, a Number must Release a member of the '3,6,9 Family Group', specifically one of the '3/6 Sibling/Cousins'. For example, in order for the 7 to Become the 4, it must Release the 3, in that "7-3=4", while in order for the 7 to Become the 1, it must Release the 6, in that "7-6=1". Inversely, in order to Become a Greater fellow Family Group member, a Number must Absorb one of the '3/6 Sibling/Cousins'. For example, in order for the 2 to Become the 5, it must Absorb the 3, in that "2+3=5", while in order for the 2 to Become the 8, it must Absorb the 6, in that "2+6=8". While the 'Self-Sibling/Cousin 9' displays similar behavior when it is Added to or Subtracted from a Number, though in a completely Neutral manner, in that any 'Base Number' which the 9 is Added to or Subtracted from remains completely unchanged in terms of its condensed value (for example, "2+9=11(2)" and "2-9 = -7(2)").

This means that the 'Intra-Family Group' changes in the 'Reactive Charge' of a Number are facilitated exclusively by the Absorption or Release (this being the Addition or Subtraction) of one of the members of the '3/6 Sibling/Cousins'. These 'Intra-Family Group Interactions' have no effect on the 'Color Charge' of a Number (as has been seen in previous Standard Model of Physics themed chapters), and these 'Intra-Family Group Interactions' all maintain overall 'Color Charge Conservation' (as was seen in the first section of this chapter). Also, in addition to maintaining 'Color Charge Conservation', these 'Intra-Family Group Interactions' also maintain 'Reactive Charge Conservation', as will be shown and explained throughout this section. (In this section, we will examine the 'Inter-Family Group (+/-) Sibling Interactions' which involve the Absorption or Release of '3,6,9 Family Group' members, all of which will maintain 'Reactive Charge Conservation'. The remaining 'Inter-Family Group (+/-) Sibling Interactions' (as well as the 'Intra-Family Group (+/-) Sibling Interactions') may or may not maintain 'Reactive Charge Conservation', as will be seen in the next section of this chapter.)

We will start with the Greatest of the '2,5,8 Family Group' members, this being the 8, which is shown below (followed by the remaining '2,5,8 Family Group' members). (Throughout the remainder of this chapter, the individual 'Base Numbers' will be represented as Quanta, or Numbers inside of circles, as has been the case throughout several of the previous Standard Model of Physics themed chapters. While the highlighting which will be utilized throughout this section will involve a 'Reactive Charge' color code, which means that all of the 'First Charged Quanta' will be highlighted in green, all of the 'Second Charged Quanta' will be highlighted in red, and all of the 'Third Charged Quanta' will be highlighted in blue. Also, the leftmost of each of these overall examples will involve the 'Subtractive Interaction', and the rightmost of each of these overall examples will involve the 'Additive Interaction' (with the 'Additive Interaction' being considered to be a form of Absorption, as was explained in "Quantum Mathematics and the Standard Model of Physics Part Five: 'Color and Reactive Charges' "). While the leftmost of the Quanta which are involved in each of the individual examples will be the original Quanta (this being the minuend or the addend), the centermost Quanta will be the Released or Absorbed Quanta (this being the subtrahend or the addend, respectively), and the rightmost of the Quanta will be the new Quanta (this being the difference or the sum).)

Subtraction (Release)

③ = ⑤
/
⑧ - ⑥ = ②
\
⑨ = ⑧

Addition (Absorption)

③ = ②
/
⑧ + ⑥ = ⑤
\
⑨ = ⑧

Above, we can see that the six individual Interactions which involve Adding or Subtracting the '3,6,9 Family Group' members to or from the 8 all maintain 'Reactive Charge Conservation'.

Next, we will examine the remaining '2,5,8 Family Group' members, along with the three '1,4,7 Family Group' members, all of which are shown below (starting with the 5). (Throughout the remainder of this chapter, some of the 'Subtractive Interactions' will yield differences which involve 'Negative Base

Charged Quanta'. In these cases, the differences will be switched to 'Positive Base Charged Quanta' via 'Positive/Negative Sibling Mirroring', as has been the case throughout the previous chapters.)

Subtraction (Release)	Addition (Absorption)
③ = ②	③ = ⑧
/	/
⑤ - ⑥ = ⑧	⑤ + ⑥ = ②
\	\
⑨ = ⑤	⑨ = ⑤

Next is the Least of the '2,5,8 Family Group' members, this being the 2, which is shown below.

Subtraction (Release)	Addition (Absorption)
③ = ⑧	③ = ⑤
/	/
② - ⑥ = ⑤	② + ⑥ = ⑧
\	\
⑨ = ②	⑨ = ②

Next is the Greatest of the '1,4,7, Family Group' members, this being the 7, which is shown below.

Subtraction (Release)	Addition (Absorption)
③ = ④	③ = ①
/	/
⑦ - ⑥ = ①	⑦ + ⑥ = ④
\	\
⑨ = ⑦	⑨ = ⑦

Next is the Median '1,4,7 Family Group' member, this being the 4, which is shown below.

Subtraction (Release)	Addition (Absorption)
③ = ①	③ = ⑦
/	/
④ - ⑥ = ⑦	④ + ⑥ = ①
\	\
⑨ = ④	⑨ = ④

Next is the Least of the '1,4,7 Family Group' members, this being the 1, which is shown below.

Subtraction (Release)

```
    ③ = ⑦
  /
① - ⑥ = ④
  \
    ⑨ = ①
```

Addition (Absorption)

```
    ③ = ④
  /
① + ⑥ = ⑦
  \
    ⑨ = ①
```

Above, we can see that 'Reactive Charge Conservation' is maintained throughout all of these 'Inter-Family Group (+/-) Sibling Interactions', with the 'Reactive Charges' displaying a familiar behavior, in that the 'Reactive Charges' are displaying behavior which is similar to that which is displayed by the 'Color Charges' (with this behavior having been explained in "Quantum Mathematics and the Standard Model of Physics Part Five: 'Color and Reactive Charges' ").

The behavior which is seen above indicates that the three forms of 'Reactive Charge' display a form of behavioral Matching in relation to the '3,6,9 Family Group' members (though only in relation to the Additive and Subtractive Interactions), in that 'First Charge' acts as the 3, 'Second Charge' acts as the 6, and 'Third Charge' acts as the 9, as is shown and explained below. (In this example, the 'Reactive Charges' and the '3,6,9 Family Group' members are all highlighted in a 'Reactive Charge' color code, in order to indicate this overall form of behavioral Matching.)

'First Charge'	+ 'First Charge'	= 'Second Charge'	is equivalent to 3+3= 6(6)
'Second Charge'	+ 'Second Charge'	= 'First Charge'	is equivalent to 6+6=12(3)
'First Charge'	+ 'Second Charge'	= 'Third Charge'	is equivalent to 3+6= 9(9)
'First Charge'	+ 'Third Charge'	= 'First Charge'	is equivalent to 3+9=12(3)
'Second Charge'	+ 'Third Charge'	= 'Second Charge'	is equivalent to 6+9=15(6)
'Third Charge'	+ 'Third Charge'	= 'Third Charge'	is equivalent to 9+9=18(9)

Above, we can see that the behavior which is displayed by the three forms of 'Reactive Charge', when they are involved in the 'Addition Function', is equivalent to that which is displayed by the '3,6,9 Family Group' members when they are involved in the 'Addition Function'. (The behavioral Matching which is displayed between the three forms of 'Reactive Charge' and the three members of the '3,6,9 Family Group' also applies in relation to the 'Subtraction Function', though this equivalency is not shown above.)

This overall form of behavioral Matching also maintains in relation to the three forms of 'Color Charge', as is shown below (with the 'Color Charges' and the '3,6,9 Family Group' members all highlighted in a 'Color Charge' color code, in order to indicate this overall form of behavioral Matching).

'Green Charge'	+ 'Green Charge'	= 'Red Charge'	is equivalent to 3+3= 6(6)
'Red Charge'	+ 'Red Charge'	= 'Green Charge'	is equivalent to 6+6=12(3)
'Green Charge'	+ 'Red Charge'	= 'Blue Charge'	is equivalent to 3+6= 9(9)
'Green Charge'	+ 'Blue Charge'	= 'Green Charge'	is equivalent to 3+9=12(3)
'Red Charge'	+ 'Blue Charge'	= 'Red Charge'	is equivalent to 6+9=15(6)
'Blue Charge'	+ 'Blue Charge'	= 'Blue Charge'	is equivalent to 9+9=18(9)

Above, we can see that the previously established behavior of the three forms of 'Color Charge', when they are involved in the 'Addition Function', is equivalent to the interrelations of the '3,6,9 Family Group' members when they are involved in the 'Addition Function'. (The behavioral Matching which is displayed between the three forms of 'Color Charge' and the three members of the '3,6,9 Family Group' also applies in relation to the 'Subtraction Function', though this equivalency is not shown above.)

While a previously unmentioned characteristic of the '3,6,9 Family Group' involves the fact that the '3,6,9 Family Group' can be considered to be a three-member 'Base Set'. We can get a clearer look at this Fractally Lesser 'Base Set' by Dividing each of the '3,6,9 Family Group' members by the 3, which will yield the new Fractally Lesser three-member 'Base Set' of 1,2,3 (in that "3/3=1", "6/3=2", and "9/3=3"). In relation to this new three-member 'Base Set', the 3 now acts as the Fractally Lesser 'Sacred Whole', in that in relation to this Trinity, the '3/0 Unity' acts as both the Greatest and Least possible condensed single-digit Number. This new, Fractally Lesser three-member 'Base Set' is shown below, beneath the standard nine-member 'Base Set' (with the 'Base Sets' both displayed as Infinitely repeating patterns, and with their respective 'Sacred Wholes' (these being the 9/0 and the 3/0, respectively) all highlighted arbitrarily in blue).

1,2,3,4,5,6,7,8,9,1,2,3,4,5,6,7,8,9,1,2,3,4,5,6,7,8,9,...
1,2,3,1,2,3,1,2,3,1,2,3,1,2,3,1,2,3,1,2,3,1,2,3,1,2,3,...

This Fractally Lesser three-member 'Base Set' involves an alternate method of condensation, one in which the 3 is the upper limit of the base, which means that the next Number after the 3 would be the 1 (instead of the 4). This means that there are only nine unique 'Addition Functions' available to us in relation to this alternate three-member 'Base Set' (disregarding the quality of Non-Locality), all of which are shown below. (While if the quality of Non-Locality is taken into account, there are only six unique 'Addition Functions' available to us in relation to this alternate three-member 'Base Set'.)

1+1= 2	2+1= 3	3+1=4(1) ('No Change Function')
1+2= 3	2+2=4(1)	3+2=5(2) ('No Change Function')
1+3=4(1) ('No Change Function')	2+3=5(2) ('No Change Function')	3+3=6(3) ('No Change Function')

Above, we can see that in relation to this three-member 'Base Set', the '+3 Addition Functions' are now acting as 'No Change Functions' (where as in relation to the standard nine-member 'Base Set', the '+9 Addition Functions' are the 'No Change Functions'). In this alternate base, the 4 condenses to the 1, the 5 condenses to the 2, and the 6 condenses to the 3, with this condensive behavior maintaining to Infinity (in that the 7 condenses to the 1, the 8 condenses to the 2, the 9 condenses to the 3, etc.).

While the interrelations between the '3,6,9 Family Group' members can also be viewed as the interrelations between three unique fractions, as is also the case in relation to the members of the alternate three-member 'Base Set', as well as in relation to the various forms of Color and Reactive Charge (individually). This is shown and explained below, with the Numbers and fractions all highlighted in the same color code as was utilized in relation to the previous examples.

3+3= 6(6) is equivalent to 1/3+1/3=   2/3 (2/3)
6+6=12(3) is equivalent to 2/3+2/3= 11/3 (4/3)
3+6= 9(9) is equivalent to 1/3+2/3= 1   (3/3)
3+9=12(3) is equivalent to 1/3+3/3= 11/3 (4/3)
6+9=15(6) is equivalent to 2/3+3/3= 12/3 (5/3)
9+9=18(9) is equivalent to 3/3+3/3= 2   (6/3)

Above, we can see that in relation to the 'Addition Function', the interrelations between the '3,6,9 Family Group' members are equivalent to the interrelations between the fractions 1/3, 2/3, and 3/3 (which themselves are the fractional representation of the 'Infinitely Repeating Decimal Numbers' .3..., .6..., and .9..., respectively). This means that a Charge of 1/3 is the equivalent of a generic 'Positive Charge' (such as a 'Green Charge' or a 'First Charge'), and is simply the first of three options (these being 1/3, 2/3, and 3/3). While the second of these three options, which is a Charge of 2/3, is the equivalent of a generic 'Negative Charge' (such as a 'Red Charge' or a 'Second Charge'), and the third of these options, which is a Charge of 3/3, is the equivalent of a generic 'Neutral Charge' (such as a 'Blue Charge' or a 'Third Charge'). (The behavioral Matching which is displayed between the '3,6,9 Family Group' members and the fractions of 1/3, 2/3, and 3/3 also applies in relation to the 'Subtraction Function', though this equivalency is not shown above.)

In the example which is seen above, 'Whole Number' parts of the sums are all highlighted in blue. We have disregarded the 'Whole Numbers' in relation to this example, which is due to the fact that we are working with fractional representations of 'Infinitely Repeating Decimal Numbers', and as has been seen throughout previous chapters, the 'Whole Numbers' are usually disregarded in relation to 'Infinitely Repeating Decimal Numbers'. Though in this case, the 'Whole Numbers' are being disregarded due to their acting as a general form of Neutrality (as will be explained in a moment), therefore they are all highlighted in blue.

The nine unique 'Addition Functions' which are available to us in relation to this three-member fractional 'Base Set' are all shown below.

1/3+1/3= 2/3	2/3+1/3=1	3/3+1/3=11/3
1/3+2/3=1	2/3+2/3=11/3	3/3+2/3=12/3
1/3+3/3=11/3	2/3+3/3=12/3	3/3+3/3=2

Above, we can see that the 'Whole Number' parts of these sums are all highlighted in blue, with this form of highlighting indicating that these Numbers involve a form of Neutrality (as was mentioned a moment ago). This is due to the fact that the fractional option of 3/3 is the equivalent of a generic 'Neutral Charge', and the fraction of 3/3 can also be indicated as the 'Whole Number' 1, as is the case in relation to the sums which are seen above. Furthermore, in relation to this three-member fractional 'Base Set', all 'Whole Numbers' will be considered to be the equivalent of a generic 'Neutral Charge', which is due to the fact that any 'Whole Numbers' which are Added together will always yield a sum which is a 'Whole Number', with this behavior being similar to that which is displayed by Neutrality, in that any Quantity of Neutrals which are Added together will always yield a Neutral.

The progression of this three-member fractional 'Base Set' continues on to Infinity, as is shown below, with the fractions represented as 'Whole Numbers' (whenever possible), and with these 'Whole Numbers' Growing by 1 on every third step.

1/3, 2/3, 1, 11/3, 12/3, 2, 21/3, 22/3, 3, 31/3, 32/3, 4, 41/3, 42/3, 5, 51/3, 52/3, 6, ...

Above, we can see that each of these overall fractions maintains the charge of its fractional part, as the 'Whole Number' parts of these fractions are all acting as generic Neutrals.

That brings this section to a close. To recap, the various forms of Charges which have been examined in the second half of this section are all generic forms of Charge. Though the behaviors which are displayed by these three generic forms of Charge can apply in relation to the concepts of 'Color Charge' and 'Reactive Charge', both of which involve this overall Trinity of Charges. (While the concept of 'Base Charge' also involves a Trinity of Charges (these being Positive, Negative, and Neutral), though that Trinity of Charges is unique from (though similar to) those of Color and Reactive Charge.)

****

In this section, we will examine all of the remaining 'Inter-Family Group (+/-) Sibling Interactions' and 'Intra-Family Group (+/-) Sibling Interactions'. Some of these Interactions will maintain 'Reactive Charge Conservation', though others will not, as will be shown and explained throughout this section.

First, we will examine the 'Inter-Family Group (+/-) Sibling Interactions' which involve the 1,4,7 and 2,5,8 Family Group members (together), all of which are shown below. (In relation to the first few of these examples, the 'Subtractive Interactions' all involve minuends which are '1,4,7 Family Group' members.)

We will start with the 7, which is shown below.

Subtraction (Release)

② = ⑤
/
⑦ - ⑤ = ②
\
⑧ = ⑧

Addition (Absorption)

② ≠ ⑨
/
⑦ + ⑤ ≠ ③
\
⑧ ≠ ⑥

Next is the 4, which is shown below.

Subtraction (Release)

② = ②
/
④ - ⑤ = ⑧
\
⑧ = ⑤

Addition (Absorption)

② ≠ ⑥
/
④ + ⑤ ≠ ⑨
\
⑧ ≠ ③

Next is the 1, which is shown below.

Subtraction (Release)

② = ⑧
/
① - ⑤ = ⑤
\
⑧ = ②

Addition (Absorption)

② ≠ ③
/
① + ⑤ ≠ ⑥
\
⑧ ≠ ⑨

Above, in the leftmost vertical column, we can see that 'Reactive Charge Conservation' is maintained through all nine of these individual 'Inter-Family Group Subtractive Interactions'. While none of these individual 'Inter-Family Group Additive Interactions' maintain 'Reactive Charge Conservation', as can be seen in the rightmost vertical column. (Throughout this section, the lack of 'Reactive Charge Conservation' will be indicated with "≠'s", as is the case in the examples which are seen above.)

Though 'Reactive Charge Conservation' is not displayed when we reverse the Family Group memberships of the minuends and the subtrahends which are involved in these 'Inter-Family Group Subtractive Interactions', as is shown below. (There is no need for us to reverse the Family Group memberships of the Addends which are involved in the 'Inter-Family Group Additive Interactions' which were seen a moment ago, due to the Quanta possessing the quality of Non-Locality in relation to that particular form of Interaction, as has been explained in previous chapters.)

Subtraction (Release)

① ≠ ⑦
/
⑧ - ④ ≠ ④
\
⑦ ≠ ①

Subtraction (Release)

① ≠ ④
/
⑤ - ④ ≠ ①
\
⑦ ≠ ⑦

Subtraction (Release)

① ≠ ①
/
② - ④ ≠ ⑦
\
⑦ ≠ ④

Above, we can see that none of these 'Inter-Family Group Subtractive Interactions' display 'Reactive Charge Conservation'.

This lack of 'Reactive Charge Conservation' is also displayed if we reverse the order of the minuends and the subtrahends which are involved in the 'Inter-Family Group Subtractive Interactions' which involve the '3,6,9 Family Group' members (those which were examined in the previous section), as is shown below. (The reversed order 'Inter-Family Group Additive Interactions' are not shown below, again due to the fact that the Quanta possess the quality of Non-Locality).

We will start with the 9, which is shown below.

Subtraction (Release)

```
    ② ≠ ⑦
  /
⑨ - ⑤ ≠ ④
  \
    ⑧ ≠ ①
```

Subtraction (Release)

```
    ① ≠ ⑧
  /
⑨ - ④ ≠ ⑤
  \
    ⑦ ≠ ②
```

Next is the 6, which is shown below.

Subtraction (Release)

```
    ② ≠ ④
  /
⑥ - ⑤ ≠ ①
  \
    ⑧ ≠ ⑦
```

Subtraction (Release)

```
    ① ≠ ⑤
  /
⑥ - ④ ≠ ②
  \
    ⑦ ≠ ⑧
```

Next is the 3, which is shown below.

Subtraction (Release)

```
    ② ≠ ①
  /
③ - ⑤ ≠ ⑦
  \
    ⑧ ≠ ④
```

Subtraction (Release)

```
    ① ≠ ②
  /
③ - ④ ≠ ⑧
  \
    ⑦ ≠ ⑤
```

Above, we can see that none of these 'Inter-Family Group Subtractive Interactions' display 'Reactive Charge Conservation'.

Next, moving on to 'Intra-Family Group (+/-) Sibling Interactions', the '1,4,7 Family Group' members maintain 'Reactive Charge Conservation' through their 'Intra-Family Group Subtractive Interactions', though not through their 'Intra-Family Group Additive Interactions', as is shown below. (Throughout these examples, the differences of 0 will be represented as ⑨'s, as has been the case throughout the previous Standard Model of Physics themed chapters.)

Subtraction (Release)

```
    ① = ⑥
  /
⑦ - ④ = ③
  \
    ⑦ = ⑨
```

Addition (Absorption)

```
    ① ≠ ⑧
  /
⑦ + ④ ≠ ②
  \
    ⑦ ≠ ⑤
```

Subtraction (Release)

```
    ① = ③
   /
④ - ④ = ⑨
   \
    ⑦ = ⑥
```

Addition (Absorption)

```
    ① ≠ ⑤
   /
④ + ④ ≠ ⑧
   \
    ⑦ ≠ ②
```

Subtraction (Release)

```
    ① = ⑨
   /
① - ④ = ⑥
   \
    ⑦ = ③
```

Addition (Absorption)

```
    ① ≠ ②
   /
① + ④ ≠ ⑤
   \
    ⑦ ≠ ⑧
```

Above, in the leftmost vertical column, we can see that 'Reactive Charge Conservation' is maintained through all nine of these individual 'Intra-Family Group Subtractive Interactions'. While none of these individual 'Intra-Family Group Additive Interactions' maintain 'Reactive Charge Conservation', as can be seen in the rightmost vertical column.

While the '2,5,8 Family Group' members maintain 'Reactive Charge Conservation' through their 'Intra-Family Group Subtractive Interactions' as well as their 'Intra-Family Group Additive Interactions', as is shown below.

Subtraction (Release)

```
    ② = ⑥
   /
⑧ - ⑤ = ③
   \
    ⑧ = ⑨
```

Addition (Absorption)

```
    ② = ①
   /
⑧ + ⑤ = ④
   \
    ⑧ = ⑦
```

Subtraction (Release)

```
    ② = ③
   /
⑤ - ⑤ = ⑨
   \
    ⑧ = ⑥
```

Addition (Absorption)

```
    ② = ⑦
   /
⑤ + ⑤ = ①
   \
    ⑧ = ④
```

Subtraction (Release)

② = ⑨
/
② - ⑤ = ⑥
\
⑧ = ③

Addition (Absorption)

② = ④
/
② + ⑤ = ⑦
\
⑧ = ①

Above, we can see that these eighteen 'Intra-Family Group (+/-) Sibling Interactions' all maintain 'Reactive Charge Conservation'.

This leaves the '3,6,9 Family Group' members, all of which maintain 'Reactive Charge Conservation' through their 'Intra-Family Group (+/-) Sibling Interactions', as is shown below.

Subtraction (Release)

③ = ⑥
/
⑨ - ⑥ = ③
\
⑨ = ⑨

Addition (Absorption)

③ = ③
/
⑨ + ⑥ = ⑥
\
⑨ = ⑨

Subtraction (Release)

③ = ③
/
⑥ - ⑥ = ⑨
\
⑨ = ⑥

Addition (Absorption)

③ = ⑨
/
⑥ + ⑥ = ③
\
⑨ = ⑥

Subtraction (Release)

③ = ⑨
/
③ - ⑥ = ⑥
\
⑨ = ③

Addition (Absorption)

③ = ⑥
/
③ + ⑥ = ⑨
\
⑨ = ③

Above, we can see that these eighteen 'Intra-Family Group (+/-) Sibling Interactions' all maintain 'Reactive Charge Conservation'.

That brings this section to a close.

****

Next, we will list all of the possible types of Intra- and Inter- Family Group Additive and Subtractive Interactions, along with whether or not each of these forms of Interaction maintains 'Reactive Charge Conservation', all of which is shown and explained below.

'Intra-1,4,7 Family Group (+/-) Sibling Interactions':	Additive - No	Subtractive - Yes
'Intra-2,5,8 Family Group (+/-) Sibling Interactions':	Additive - Yes	Subtractive - Yes
'Intra-3,6,9 Family Group (+/-) Sibling Interactions':	Additive - Yes	Subtractive - Yes

1,4,7 and 2,5,8 'Inter-Family Group (+/-) Sibling Interactions':	Additive - No	Subtractive - Yes/No
1,4,7 and 3,6,9 'Inter-Family Group (+/-) Sibling Interactions':	Additive - Yes	Subtractive - Yes/No
2,5,8 and 3,6,9 'Inter-Family Group (+/-) Sibling Interactions':	Additive - Yes	Subtractive - Yes/No

Above, in the top half of the chart, we can see that in relation to the 'Intra-Family Group (+/-) Sibling Interactions', 'Reactive Charge Conservation' is maintained throughout, with the lone exception of the 'Intra-Family Group Additive Interactions' which involve the '1,4,7 Family Group' members, none of which maintain 'Reactive Charge Conservation'. Then, in the bottom half of the chart, we can see that in relation to the 'Inter-Family Group (+/-) Sibling Interactions', 'Reactive Charge Conservation' is maintained by all of the types of 'Additive Interaction', with the exception of those which involve the 1,4,7 Family Group' members being Added to the '2,5,8 Family Group' members, none of which maintain 'Reactive Charge Conservation'. While in relation to the 'Inter-Family Group Subtractive Interactions', the Interactions which involve Subtracting a member of a Greater Family Group from a member of a Lesser Family Group all maintain 'Reactive Charge Conservation', though the Interactions which involve Subtracting a member of a Lesser Family Group from a member of a Greater Family Group do not maintain 'Reactive Charge Conservation'. (The somewhat counterintuitive fact that the Subtraction of a member of a Greater Family Group from a member of a Lesser Family Group maintains Conservation, while the Subtraction of a member of a Lesser Family Group from a member of a Greater Family Group does not leads us to the concept of 'Conserved Interactions' (or 'Conserved Functions'), which will be explained in "Quantum Mathematics and the Standard Model of Physics Part Nine: 'Conserved Interactions and Anti-Charge' ".)

That brings this section, and therefore this chapter to a close. In this Standard Model of Physics themed chapter, we managed to gain a better understanding of the '(+/-) Sibling Functions', which we achieved by treating these two Functions as Physical Interactions, instead of strictly Mathematical Functions. (While the '(X / /) Sibling Functions' were disregarded in this chapter, these two Functions will eventually be examined (as Interactions) in "Quantum Mathematics and the Standard Model of Physics Part Nine: 'Conserved Interactions and Anti-Charge' " .)