Question 2427) - Sometimes the shares of a group cannot be divided according to the denominator used. How are the figures adjusted?

A: Firstly, understand theat the mathematical relationship between the numbers of the denominators are one of the following tamathul, tadakhul, tawafuq or tabayun.
Tamathul is where the numbers are equal e.g. 3 and 3.
Tadakhul is where one number is a factor of the other e.g. 3 and 9.
Tawafuq is where the smaller number is not in itself a factor of the larger number, but a third number exists as a common factor between them e.g. 8 and 20 and both be divided by 4 .
Tabayun is where neither number is a factor of the other, nor is there a third number which is a common factor e.g. 9 and 10.
Once this is understood, know that if the shares of a group do not match with the total denominator, multiply the number in which the group needs to be divided with the 'asl or the 'Awl and the result will encompass the various shares inshallah.
for example, a man leaves his wife and two brothers. The wife gets a quarter and the brothers three-quarters. The denominator of 4 cannot cleanly divide amongst the parties. Hence multiply the asl of 4 with the number of brothers of 2 and use the result of 8 . The wife gets 2 shares of 8 and the brothers get 6 . This was an example of Tabayun.
In Tawafuq denominator is multiplied by the common factor. For example, a man leaves his wife and 6 brothers. The wife gets a quarter and the brothers get 3 quarters. Divide the number of brothers by their shares, which is 6 divided by 3 , which equals 2 . Now multiply the shares by 2. The total shares are now 8 . The wife gets 2 and each brother gets 1 . This is in a case where there was no 'Awl.
An example with 'Awl and Tabayun is when the estate is divided amongst the husband and three full sisters. The Asl of 6 is made Awl to 7 . Tashih is then made out of 21.
An example with 'Awl and Tabayun is when the estate is divided amongst the husband, parents and 6 daughters. The Asl is 12. The husband gets a quarter i.e. 3 shares. Each parent gets a sixth which totals 4 shares. The 6 daughters get two-thirds which equals 8 shares. The denominator cannot accommodate the total shares'and 'Awl is made to 15 and the daughters' shares (8) are divided by the number of daughters (6). 8 and 6 can both be divided by 2 , which reduces the number of daughters to 3.3 is multiplied with the 'Awl (15) and the result is a denominator of 45 . The shares are now completely balanced. The husband gets 9 of the 45 , the parents get 12 and the daughters24, each daughter gets 4 .
~ al-Quduri ~

