FARAIDH AND ITS CORRELATION WITH MATHEMATICS CONCEPTS IN LIFE

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Abstract

Faraidh is one of the sciences that every Muslim must know. This is evidenced by the existence of arguments regarding this knowledge in the Qur'an. Meanwhile, in the division and calculations, another science tool is needed, namely mathematics as a companion. So the purpose of this study is to describe Faraidh and its correlation with mathematical concepts in life. The method used is descriptive qualitative with a literature study approach, then the data collection uses documentation techniques and is analyzed and finally concluded. The results of the study show that Faraidh Science has a very close relationship with Mathematical Concepts so that it produces fractions consisting for $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{3}, \frac{1}{6}, \text{dan} \frac{2}{3}$ commonly known as alfurudhul muqoddaroh for each heir.

Keywords: *Faraidh, Mathematics, Application*

Abstrak

Faraidh menjadi salah satu ilmu pengetahuan yang harus diketahui oleh setiap muslim. Hal tersebut dibuktikan dengan adanya dalil mengenai ilmu tersebut di dalam alqur'an. Sementara itu dalam pembagian dan perhitungannya diperlukan ilmu alat lain yakni matematika sebagai pengiringnya. Maka tujuan dari penelitian ini adalah untuk mendeskripsikan terkait Faraidh Dan Korelasinya Dengan Konsep Matematika Dalam Kehidupan. Metode yang digunakan adalah kualitatif deskriptif dengan pendekatan studi pustaka, lalu pengumpulan datanya menggunakan teknik dokumentasi serta dianalisis dan terakhir disimpulkan. Hasil penelitian menunjukkan bahwa Ilmu Faraidh memiliki kaitan yang sangat erat dengan Konsep Matematika sehingga menghasilkan bilangan pecahan yang terdiri dari $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{3}, \frac{1}{6}, \text{dan} \frac{2}{3}$ atau yang biasa disebut dengan alfurudhul muqoddaroh untuk masing-masing ahli waris.

Kata Kunci: *Peran Faraidh, Matematika, Aplikasi*

INTRODUCTION

Al-Qur'an is a guideline and source of Islamic teachings which contains everything that exists in this world and the hereafter. Al-Qur'an is the essence of all science. Apart from that, the Qur'an is also an official guideline and is interesting material for Muslims to study (Nurhuda et al., 2023). One of the general sciences that are related to the Al-Qur'an is mathematics (Aminah & Yazidah, 2018). Many discoveries and research by mathematicians show that the Qur'an contains mathematical knowledge such as the number of days in a week, the number of days in a year, and so on. The application of mathematics in everyday life is a system of inheritance.

The science of faraidh is the study of the transfer of property from dead people to living people. Where the moment of life will be determined by several questions such as what I live for, where

is my life's purpose and so on (Princess & Nurhuda, 2023). Meanwhile, the law of inheritance in the Compilation of Islamic Law is contained in Article 171 explaining the law governing the transfer of inheritance of the heir and determining who is entitled to receive the inheritance and so on (Hazairin, 1993). The discussion of inheritance in Islamic law is important because it affects every property and inheritance of the heir. Given this very important inheritance issue, Allah SWT regulates and confirms it in the Qur'an. This is intended to guarantee legal certainty regarding the rights of each heir to their respective shares. Just as in the law on bank guarantees there is a share between the investor and the money saver, so there is also a share in inheritance (Hasan & Nurhuda, 2023).

The distribution of inheritance in a fair manner by applicable laws and regulations is the main thing in the inheritance process. In simple terms, the heir can be interpreted as an heir who at the time of death leaves assets to people who are still alive. While the heir is a family member of a deceased person who replaces the position of the heir in the field of wealth law due to the death of the heir. The family itself usually consists of a father, mother, and children who aim to build a household so that it is sakinah mawadah warohmah (Nurhuda, 2023a). Inheritance law is the law governing the transfer of assets left by someone who dies and the consequences for the heirs. The distribution of inheritance has been stipulated in the Qur'an in a qath'i manner for sons, daughters, fathers, mothers, wives, husbands, and others, each portion has been determined. The distribution of inheritance obtained by the heirs differs from one another.

The rules regarding inheritance have been established by Allah through His words in the Qur'an in Surah An-Nisa' verse 11:

يُوْصِيْكُمُ اللهُ فِيْٓ اَوْلَادِكُمْ لِلذَّكَرِ مِثْلُ حَظِّ الْاُنْثَيَيْنِۚ فَاِنْ كُنَّ نِسَاۤءً فَوْقَ اثْنَتَيْنِ فَلَهُنَّ ثُلُثَا مَا تَرَكَۚ وَاِنْ كَانَتْ وَاحِدَةً فَلَهَا النِّصْفُۗ وَلِاَبَوَيْهِ لِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ مِمَّا تَرَكَ اِنْ كَانَ لَهٗ وَلَدٌۚ فَاِنْ لَّمْ يَكُنْ لَّهٗ وَلَدٌ وَّوَرِثَهٗٓ اَبَوٰهُ فَلِاُمِّهِ الثُّلُثُۚ فَاِنْ كَانَ لَهٗٓ اِخْوَةٌ فَلِاُمِّهِ السُّدُسُ مِنْۢ بَعْدِ وَصِيَّةٍ يُّوْصِيْ بِهَآ اَوْ دَيْنٍۗ اٰبَاۤؤُكُمْ وَاَبْنَاۤؤُكُمْۚ لَا تَدْرُوْنَ اَيُّهُمْ اَقْرَبُ لَكُمْ نَفْعًاۗ فَرِيْضَةً مِّنَ اللهِۗ اِنَّ اللهَ كَانَ عَلِيْمًا حَكِيْمًا

Meaning: *Allah prescribes (obliges) you regarding (the distribution of inheritance for) your children, (namely) the share of a son is equal to that of two daughters. 146) If the children are all girls whose number is more than two, their share two-thirds of the treasure left behind. If she (the daughter) is only one, she gets half (the property left behind). For both parents, each share is one-sixth of the assets left behind, if he (the deceased) has children. If he (the deceased) has no children and he is inherited by both parents (only), his mother gets one-third. If he (the deceased) had several brothers, his mother got one-sixth. (The inheritance is divided) after (fulfilled) the will he made or (and paid off) the debt. (About) your parents and your children, you do not know which of them is of more benefit to you. This is Allah's decree. Verily, Allah is All-Knowing, All-Wise.* (surah an-Nisa'/4: 34).

In surah An-Nisa's verse 11 it is explained that the determination of parts for heirs uses a mathematical concept, namely fractional numbers. Fractional numbers are numbers that form $\frac{a}{b}$ with a, b in an integer and b not are equal to zero (Pusfitasari & Hartoyo, 2019). The number of fractions in surah

An-Nisa verse 11 is two-thirds (Tsulasa), half (nisf), one-sixth (Sudus), and one-third (tsulu)(Ilfiani, 2021).

Studying the science of faraidh in Islam has its law, namely fardu kifayah which means it is not considered fardhu ain (Nurhuda, 2023b). The obligation to learn and teach faraidh knowledge will fall if there is one person who carries it out. If no one does it then all the people will bear the sin, of neglecting the obligation. The purpose of studying faraidh science is to avoid disputes over assets left by the heir to the heirs. And the heirs get the fairest share. In this scientific article, the author will discuss faraidh and the mathematical concepts used and examples of their applications.

RESEARCH METHODS

This research is qualitative research which includes a type of literature study. Namely, research that focuses on research on journals, books, magazines, newspapers, and other literature that is considered supportive and conducts studies and searches on relevant themes (Nurhuda, 2021). This research uses an integration-interconnection approach in which it combines, collaborates, and connects two or more disciplines so that the two disciplines synergize with each other (Masyitoh, 2020). The primary data source is the Al-Qur'an and secondary sources are journals, books, and proceedings related to the topic. The data collection technique used is observation and documentation, namely observing and recording it in mind (Nurhuda, 2022a). While the analysis technique used in this research is content analysis (Idris, 2021) The steps: collecting data-reducing data-presenting data-conclusions descriptively.

RESULT AND DISCUSSION

Concept of Mathematics and Faraidh

Umar bin Khattab said, "Learn the science of faraidh because it is part of your religion". The science of faraid is one of the most important disciplines in Islam to study. In faraidh science, there is a mathematical concept, namely the concept of rational numbers or fractions. Of course, rational is related to reason, not to the soul or heart(Nurhuda, 2022b). A rational number is a number expressed as the ratio of two integers ab, written $\frac{a}{b}$ with the provision of $b \neq 0$. These rational numbers are often referred to as ordinary fractions (Musetyo, 2007).

A person is deemed entitled to receive an inheritance if there is a relationship with the deceased in the following three cases:

1. Lineage relationship
2. Marital relationship (husband or wife)
3. Relationship wala' (liberation from slavery)

The above criteria are limited by some things below:

a. Not the murder of the heir

b.   Not slaves or slaves

c.   No different religion

d.   Don't die together

        Pay attention to the following verses related to inheritance in the Qur'an in surah An-Nisa's verses 11, 12, and 176.

1.   Surah An-Nisa' verse 11

يُوْصِيْكُمُ اللّٰهُ فِيْٓ اَوْلَادِكُمْ لِلذَّكَرِ مِثْلُ حَظِّ الْاُنْثَيَيْنِ ۚ فَاِنْ كُنَّ نِسَاۤءً فَوْقَ اثْنَتَيْنِ فَلَهُنَّ ثُلُثَا مَا تَرَكَ ۚ وَاِنْ كَانَتْ وَاحِدَةً فَلَهَا النِّصْفُ ۗ وَلِاَبَوَيْهِ لِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ مِمَّا تَرَكَ اِنْ كَانَ لَهٗ وَلَدٌ ۚ فَاِنْ لَّمْ يَكُنْ لَّهٗ وَلَدٌ وَّوَرِثَهٗٓ اَبَوٰهُ فَلِاُمِّهِ الثُّلُثُ ۚ فَاِنْ كَانَ لَهٗٓ اِخْوَةٌ فَلِاُمِّهِ السُّدُسُ مِنْ بَعْدِ وَصِيَّةٍ يُّوْصِيْ بِهَآ اَوْ دَيْنٍ ۗ اٰبَاۤؤُكُمْ وَاَبْنَاۤؤُكُمْ ۚ لَا تَدْرُوْنَ اَيُّهُمْ اَقْرَبُ لَكُمْ نَفْعًا ۗ فَرِيْضَةً مِّنَ اللّٰهِ ۗ اِنَّ اللّٰهَ كَانَ عَلِيْمًا حَكِيْمًا

Meaning: *Allah prescribes (obliges) you regarding (the distribution of inheritance for) your children, (ie) the share of a son is equal to the share of two daughters. If the children are all girls with more than two in number, their share is two-thirds of the assets left behind. If she (the daughter) is only one, she gets half (the property left behind). For both parents, each share is one-sixth of the assets left behind, if he (the deceased) has children. If he (the deceased) has no children and he is inherited by both parents (only), his mother gets one-third. If he (the deceased) had several brothers, his mother got one-sixth. (The inheritance is divided) after (fulfilled) the will he made or (and paid off) the debt. (About) your parents and your children, you do not know which of them is of more benefit to you. This is Allah's decree. Verily, Allah is All-Knowing, All-Wise.* (surah an-Nisa'/4: 34).

2.   Surah An-Nisa' verse 12

۞ وَلَكُمْ نِصْفُ مَا تَرَكَ اَزْوَاجُكُمْ اِنْ لَّمْ يَكُنْ لَّهُنَّ وَلَدٌ ۚ فَاِنْ كَانَ لَهُنَّ وَلَدٌ فَلَكُمُ الرُّبُعُ مِمَّا تَرَكْنَ مِنْ بَعْدِ وَصِيَّةٍ يُّوْصِيْنَ بِهَآ اَوْ دَيْنٍ ۗ وَلَهُنَّ الرُّبُعُ مِمَّا تَرَكْتُمْ اِنْ لَّمْ يَكُنْ لَّكُمْ وَلَدٌ ۚ فَاِنْ كَانَ لَكُمْ وَلَدٌ فَلَهُنَّ الثُّمُنُ مِمَّا تَرَكْتُمْ مِّنْ بَعْدِ وَصِيَّةٍ تُوْصُوْنَ بِهَآ اَوْ دَيْنٍ ۗ وَاِنْ كَانَ رَجُلٌ يُّوْرَثُ كَلٰلَةً اَوِ امْرَاَةٌ وَّلَهٗٓ اَخٌ اَوْ اُخْتٌ فَلِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ ۚ فَاِنْ كَانُوْٓا اَكْثَرَ مِنْ ذٰلِكَ فَهُمْ شُرَكَاۤءُ فِى الثُّلُثِ مِنْ بَعْدِ وَصِيَّةٍ يُّوْصٰى بِهَآ اَوْ دَيْنٍ ۙ غَيْرَ مُضَاۤرٍّ ۚ وَصِيَّةً مِّنَ اللّٰهِ ۗ وَاللّٰهُ عَلِيْمٌ حَلِيْمٌ ۗ

Meaning: *For you (husbands) half of the property is left by your wives if they do not have children. If they (your wives) have children, you get a quarter of the assets left by them after (fulfilling) the will they made or (and after paying) their debts. For them (wives) a quarter of what you leave if you don't have children. If you have children, for them (the wives) one-eighth of the property that you left behind (after being fulfilled) the will that you made, or (and after being paid) your debts. If a person, both male and female dies without leaving father and children but has a brother (Seibu) or a sister (Seibu), each of the two types of siblings is one-sixth of the treasure. However, if there is more than one of them (the mother's siblings), they will share that one-third share, after (fulfilling a will) made or (and after*

paying) the debt without causing trouble (heirs). Such is God's provision. Allah is All-Knowing, Most Forgiving. (QS. An-Nisa': 12)

3.   Surah An-Nisa' verse 176

يَسْتَفْتُوْنَكَّ قُلِ اللهُ يُفْتِيْكُمْ فِى الْكَلٰلَةِِّۗاِنِ امْرُؤٌا هَلَكَ لَيْسَ لَهٗ وَلَدٌ وَّلَهٗٓ اُخْتٌ فَلَهَا نِصْفُ مَا تَرَكَّۚ وَهُوَ يَرِثُهَآ اِنْ لَّمْ يَكُنْ لَّهَا وَلَدٌۗ فَاِنْ كَانَتَا اثْنَتَيْنِ فَلَهُمَا الثُّلُثٰنِ مِمَّا تَرَكَۗوَاِنْ كَانُوْٓا اِخْوَةً رِّجَالًا وَّنِسَاۤءً فَلِلذَّكَرِ مِثْلُ حَظِّ الْاُنْثَيَيْنِّۗ يُبَيِّنُ اللهُ لَكُمْ اَنْ تَضِلُّوْاۗ وَاللهُ بِكُلِّ شَيْءٍ عَلِيْمٌ

Meaning: *They ask you for a fatwa (about kalālah). that he left. As for his brother, he inherits (all of his sister's assets) if he does not have children. However, if there are two sisters, for both of them two-thirds of the inheritance is left. If they (the heirs consist of) several brothers and sisters, the share of one brother is equal to that of two sisters. Allah explains (this law) to you so that you do not go astray. Allah is All-Knower of all things."* (QS. An-Nisa': 176).

In surah, An-Nisa' Allah SWT explains in detail how many parts of each heir or what is called al-furuudh al-muqaddarah namely $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{3}, \frac{1}{6}, dan \frac{2}{3}$.

There are fifteen male heirs, namely:

1.   Boy,
2.   Grandsons from sons on down,
3.   Father,
4.   Grandfather from father onwards upwards,
5.   Siblings,
6.   brother father,
7.   Brother and sister,
8.   Siblings' children and so on down,
9.   Children of the same father and so on down,
10.   little uncle,
11.   uncle uncle,
12.   Uncle's child and so on down,
13.   Uncle's son and so on down,
14.   Husband
15.   Mu'tiq (the person who frees the heir if he was a slave).

There are ten heirs from the female side, namely:

1.   Girl,
2.   Granddaughter from son onwards down,
3.   Mother,
4.   From maternal grandmother onwards,

5. Paternal grandmother onwards,

6. siblings,

7. dad sister,

8. sister Seibu,

9. Wife,

10. Mu'tiqah.

Ten heirs get certain parts, namely: husband, wife, mother, daughter, granddaughter, sister, mother-sister, father, if with children, grandfather if with male offspring(Barakah, 2015).

a) The husband has two conditions:

     1. Obtain $\frac{1}{2}$ if you don't have children,

     2. Obtain $\frac{1}{4}$ if you have children.

b) The wife has two states:

     1. Obtain $\frac{1}{4}$ if you don't have children,

     2. Obtain $\frac{1}{8}$ if you have children.

c) Mother has 3 states:

     1. Obtain $\frac{1}{3}$ if you do not have deceased children and do not have more than one relative.

     2. Obtain $\frac{1}{6}$ if you have children and have more than one sibling.

     3. Obtain $\frac{1}{3}$ from remaining in trouble *ghara wain* namely where the heirs are husband, father and mother, and or wife, father, and mother.

d) Granny, has one state which is Gain $\frac{1}{6}$ as long as it's unobstructed (*magic*) with a closer mother or grandmother.

e) Girls have 3 states:

     1. Obtain $\frac{1}{2}$ ing single

     2. Obtain $\frac{2}{3}$ ing more than one person.

     3. Earning leftovers with the boys.

f) Granddaughters of sons have 5 states:

     1. Obtain $\frac{1}{2}$ ing single and do not have children from the deceased

     2. Obtain $\frac{2}{3}$ more than one and do not have a deceased child.

     3. Obtain $\frac{1}{6}$ when with one daughter.

     4. *'Ashabah bi al-ghair* when with grandson,

     5. *Magnificent*(obstructed) if you are with a deceased son or more than one daughter.

g) The biological sister has five states:

1. Obtain$\frac{1}{2}$ing single and do not have children and father.

2. Obtain$\frac{2}{3}$ing more than one and do not have children and a father.

3. Obtain*asabah ma'a al-ghair* when with girls.

4. *'Ashabah bi al-ghair* when with siblings

5. Mahjub when with son and father.

h) Siblings with the father have 6 conditions:

1. Obtain$\frac{1}{2}$ing single and do not have children and father

2. Obtain$\frac{2}{3}$ing more than one and do not have children, siblings, and father.

3. Obtain*asabah ma'a al-ghair*if with daughter, do not have son, sibling, and father.

4. Obtain*'Ashabah bi al-ghair*when with a sibling.

5. Obtain$\frac{1}{6}$ one biological sister, no children, siblings, and father

6. *Magnificent* if with more than one son, father, siblings, siblings.

i) Siblings have two situations:

1. Obtain$\frac{1}{3}$ing more than one and do not have children and a father.

2. Obtain$\frac{1}{6}$ when alone and do not have children and father.

j) Father has 3 states:

1. Obtain$\frac{1}{6}$ing there is a boy

2. Obtain$\frac{1}{6}$plus the rest when with girls

3. Obtaining ashabah when there are no children

    All male heirs other than those mentioned above are entitled to the remainder.

In the case of faraidh, when the result of the sum of furudhul muqoddroh heirs produces a fraction whose numerator exceeds the denominator, the term 'aul' appears. 'Aul is to enlarge the denominator so that it is equal to the numerator. Conversely, if the result of the sum of furudhul muqodddah heirs results in the numerator is less than the denominator, the term radd appears. Radd is reducing the denominator so that it is equal to the numerator(Abdussakir, 2009).

For example, a person dies leaving a husband and two siblings. So, the husband's share is ½ and the sister's share is $2\frac{2}{3}$. Then all the parts are added up and we get$\frac{1}{2} + \frac{2}{3} = \frac{3}{6} + \frac{4}{6} = \frac{7}{6}$. Because the numerator is greater than the denominator, 'aul is used, the denominator becomes 7. Thus, the husband share$\frac{3}{7}$s the second part of the sister-to-be$\frac{4}{7}$ (Muniri, 2016).

Another example is when someone dies leaving a mother and a daughter. Mother's part is $\frac{1}{6}$ (because there are children) and girls get a share $\frac{1}{2}$. Further added and we get $\frac{1}{6} + \frac{1}{2} = \frac{1}{6} + \frac{3}{6} = \frac{4}{6}$. In this case, we will apply radd so that the denominator becomes 4. The mother part is $\frac{1}{4}$ and the daughter's share becomes $\frac{3}{4}$ (Muniri, 2016).

Examples of Application of Mathematical Concepts in Faraidh

The following discussion is an illustration of an example of inheritance distribution and its stages. In the research conductedPusfitasari & by Hartoyo (2019)The distribution of inheritance has stages, namely before the distribution of inheritance and the process of dividing inheritance.

Table 2.1 Stages of Distribution of Inheritance

Stages	Things to do	Math Concept
Before the distribution of inheritance	Fulfilling their rights: 1) Pay hospital fees, if the heir is sick. 2) Paying funeral expenses. 3) Paying debts. 4) Execute the will.	The concept of addition and subtraction operations on integers
The process of dividing the inheritance	1) Calculating the inheritance that exists after the fulfillment of the rights of the heir. 2) Determine heirs. 3) Determine the share of the heirs 4) Calculate the amount of assets for each part of the heirs.	1) Integer concept 2) The concept of rational numbers and fractions

Source:(Pusfitasari & Hartoyo, 2019)

Share one boy and one girl

For each inheritance left behind, sons and daughters receive the remaining portion and also the entire inheritance if there are no other heirs. Before carrying out the distribution of Islamic inheritance law, first, look for the origin of the problem. For example, in this case, there are no heirs other than a son and a daughter so all the inheritance belongs to them. The inheritance left behind is IDR 3,000,000.00. The origin of the problem is one share of girls and two parts of boys.

Table 2.2 Calculation of the division of Islamic inheritance law

Heir	The share	Part received
1 boy	$\frac{2}{3}$	$= \frac{2}{3} \times 3000000 = Rp2.000.000$

1 daughter	$\dfrac{1}{3}$	$= \dfrac{1}{3} \times 3000000 = Rp1.000.000$

Adopted Child Section

Adopted children do not receive an inheritance from the heir, but adopted children will receive an inheritance in the form of grants or inheritance and stipulate that the adopted child's hatah cannot be the entire property, only $\left(\dfrac{1}{3}\right)$ a third of his treasure.

Wife Section

Table 2.3 The Wife's Share in Islamic inheritance law

Cause Relationship	Heir	Condition	Property Section	Verses in the Koran
Marriage	Wife	No children/grandchildren	$\dfrac{1}{4}$	An-Nisa': 12
		There are children/grandchildren	$\dfrac{1}{8}$	An-Nisa': 12

Mother's Section

Inheritance is divided according to the rules of Islamic inheritance law, the mother gets a one-sixth share $\left(\dfrac{1}{6}\right)$ of all the assets left behind, then the wife gets one-eighth $\left(\dfrac{1}{8}\right)$, half of the boys, and one-quarter of the girls. The heirs, in this case, are the mother, wife, son, and one daughter. Mothers share $\dfrac{1}{6}$, and wives $\dfrac{1}{8}$, boys, and girls get the rest. The origin of the problem is the KPK, which can be divided by each denominator of the determined share of the heirs.

Table 2.4 Calculation of the distribution of inheritance

Heir	Part	Origin of the Problem	Part received
Mother	$\dfrac{1}{6}$	$\dfrac{1}{6} \times 24 = 4$	$= \dfrac{4}{24} \times 50.000.000 = Rp8.333.333$
Wife	$\dfrac{1}{8}$	$\dfrac{1}{8} \times 24 = 3$	$= \dfrac{3}{24} \times 50.000.000 = Rp6.250.00$
		Leftover part $1 - \dfrac{1}{6} - \dfrac{1}{8} = \dfrac{17}{24}$	$= \dfrac{17}{24} \times 50.000.000 = Rp35.416.6$ (Remaining part/ashobah)

| Girl | Remaining 1 | $\frac{1}{3}$ | $= \frac{1}{3} \times 35.461.661 = Rp 11.805.55$ |
| Boy | Remaining 2 | $\frac{2}{3}$ | $= \frac{2}{3} \times 35.461.661 = Rp 23.611.11$ |

The next example is supposed that the inheritance of Rp. 240,000,000.00 will be distributed to the heirs, namely a father, mother, and 2 sons. Therefore, the share for each father and mother $\frac{1}{6}$, while the rest for his two children $\frac{4}{6}$ for each of his children gets $\frac{2}{6}$. So the calculation is as follows:

Table 2.5 Calculation of inheritance distribution

Heir	Part	Received Portion
Father	$\frac{1}{6}$	$= \frac{1}{6} \times 240.000.000 = 40.000.000$
Mother	$\frac{1}{6}$	$= \frac{1}{6} \times 240.000.000 = 40.000.000$
2 Boys	Remnant/Ashabah	$= 240.000.000 - 80.000.000 = 160.000$ (or IDR 80,000,000.00/child)

Another example, let's say an inheritance in rupiah worth IDR 240,000,000.00 which is then distributed among the experts, including a wife, father, mother, and 2 sons. Then the share is for the wife $\frac{1}{8}$, father, and mother respectively $\frac{1}{6}$, while the rest is for her two children. By equating the denominator, the share for the wife is obtained $\frac{3}{24}$, for the father and mother respectively $\frac{4}{24}$, while the rest $\frac{13}{24}$ is for her two children. So the solution is,

Heir	Part	Received Portion
Wife	$\frac{1}{8}$	$= \frac{3}{24} \times 240.000.000 = 30.000.000$
Father	$\frac{1}{6}$	$= \frac{4}{24} \times 240.000.000 = 40.000.000$
Mother	$\frac{1}{6}$	$= \frac{4}{24} \times 240.000.000 = 40.000.000$

| 2 Boys | Remnant/Ashabah | $= 240.000.000 - 110.000.000 = 130.000$ |
| | | (or IDR 65,000,000.00/child) |

The next example is a husband dies leaving heirs consisting of a wife, a mother, a son, and 2 daughters. Total assets are IDR 300,000,000.00. Of this amount, Rp. 50,000,000.00 was inherited before marriage. The corpse has a debt of IDR 10,000,000.00 and a will for infaq IDR 5,000,000.00 and for caring for the corpse IDR 7,000,000.00. So, the division of inheritance is done mathematically as follows.

1. The deceased's estate is half of the total joint assets + innate assets, that is

$$\frac{1}{2} \times 250.000.000 + 50.000.000 = 125.000.000 + 50.000.000 = 175.000.000$$

while the remaining Rp. 125,000,000.00 is the right of the wife who is still alive, not inherited.

2. The assets left by the corpse Rp. 175,000,000.00 minus debts, wills, and funerals to become

$$Rp175.000.000 - (10.000.000 + 5.000.000 + 7.000.000) = Rp152.000.000$$

.

Inheritance share property: wife $\frac{1}{8}$, Mother $\frac{1}{6}$, and the rest for the child.

Heir	Inheritance section		
Wife	$\frac{1}{8}$	$= \frac{3}{24} \times 152.000.0$	IDR 19,000,000.00
Mother	$\frac{1}{6}$	$= \frac{4}{24} \times 152.000.0$	IDR 25,333,000.00
Child	the rest	$\frac{17}{24} \times 152.000.0$	IDR 107,667,000

Inheritance rights for sons are 2 times that of daughters. So for the boys $\frac{2}{4} \times 107.667.000 = Rp53.833.500$. Meanwhile, each daughter gets IDR 26,916,750/child.

CONCLUSION

From the description above, it can be said that Faraidh has a very close relationship with the Mathematical Concept where when one of the family members dies a calculation process is required with a numerical model to divide the inheritance. And that in Life, of course, makes it very easy because the two of them have a relationship so that they produce fractions consisting of $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{3}, \frac{1}{6}$, dan $\frac{2}{3}$ what is commonly referred to as *alfurudhul muqoddaroh* in faraidh science.

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