## Wa'alaikumus Salaam wa rahmatul Lah.

Thank you for your $d u$ ' $a$.
The three questions fall under the topic Inheritance of Grandfather along with siblings in the presence of other heirs. Here, Grandfather has three choices:

1. He takes $1 / 6$ of the estate
2. He receives $1 / 3$ of the residue
3. He acts as a Full Brother and inherits along with Full Sister and Paternal Sister(s). This is called Muqasama

In addition, when Grandfather is inheriting along with Full Sister and Paternal Sister, the Paternal sister acts as if she were a Full Sister, when Grandfather takes his share, Paternal Sister surrenders her share to the Full Sister provided it does not exceed $1 / 2$ of the entire estate.

Therefore, here are the solutions In Shaa Allah.

## CASE 1

1. When Grandfather takes $\mathbf{1 / 6}$ of the estate

| Heirs | Mother | Grandfather | Full Sister | Paternal Sister |
| :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 6$ | $1 / 6$ | $2 / 3$ |  |
| Base number | 6 |  |  |  |
| Portions | 1 | 1 | 4 |  |
| Final portions | 1 | 1 | 3 | 1 |
| Values | $1 / 6=0.17$ | $1 / 6=0.17$ | $3 / 6=0.5$ | $1 / 6=0.17$ |

Note that the joint share of Full Sister and Paternal Sister is $2 / 3$. It is assumed that there were 2 Full Sisters.

## 2. When Grandfather receives $\mathbf{1 / 3}$ of the residue

| Heirs | Mother | Grandfather | Full Sister | Paternal Sister |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 6$ | Residue |  |  |  |  |
| Base number | 6 |  |  |  |  | $*$ |
| Portions | 1 | $*$ | 18 |  |  |  |
| New base number |  |  |  |  |  |  |
| New portions | 3 | 5 | 10 |  |  |  |
| Final portions | 3 | 5 | 9 | 1 |  |  |
| Values | $3 / 18=0.17$ | 0.28 | 0.5 | 0.06 |  |  |

Given a base number of 6 , if the mother's share is deducted, the residue is 5 .
Grandfather $=1 / 3$ of $5=1.67$ (not a whole number)
" 2 Full sisters" $=2 / 3$ of $5=3.33$ (not a whole number)
So, to obtain a new base number, multiply 3 with the base number because we are looking for a new base number that can be divided by 3 so that Grandfather can have his $1 / 3$.

Therefore, $3 \times 6=18$.
New portions:
Mother $=1 / 6$ of $18=3$
Residue $=18-3=15$
Grandfather $=1 / 3$ of $15=5$
" 2 Full Sisters" $=2 / 3$ of $15=10$, to be shared 5 each.
Thereafter, Paternal Sister submits 4 portions out of 5 to Full Sister.
3. Muqasama

| Heirs | Mother | Grandfather | Full Sister | Paternal Sister |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 6$ | Residue |  |  |  |
| Base number | 6 |  |  |  |  |
| Portions | 1 | $*$ |  |  |  |
| New base number | 24 |  |  |  |  |
| New portions | 4 | 10 | 10 |  |  |
| Final portions | 4 | 10 | 10 | 0 |  |
| Values | 0.17 | 0.42 | 0.42 | 0 |  |

Grandfather acts as a Full Brother.
He and the " 2 Full Sisters" cannot share the residue of 5 after the mother's portion of 1 has been given to her.

New base number $=$ number of heads of Grandfather and " 2 Full Sisters" x Base number
That is, $4 \times 6=24$
New portions:
Mother $=1 / 6$ of $24=4$
Residue $=24-4=20$
Grandfather $=1 / 2$ of $20=10$
" 2 Full Sisters" $=1 / 2$ of $20=10$, to be shared 5 each.

Thereafter, Paternal Sister submits her entire 5 portions to Full Sister.
In conclusion, Grandfather is advised to inherit by Muqasama since he will get 0.42 rather than 0.17 or 0.28 if given $1 / 6$ of the estate or $1 / 3$ of the residue respectively.

## CASE 2

1. When Grandfather takes $\mathbf{1 / 6}$ of the estate

| Heirs | Wife | Grandfather | Full Sister | Paternal Sister |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 4$ | $1 / 6$ | $2 / 3$ |  |  |
| Base number | 12 |  |  |  |  |
| Portions | 3 | 2 | 8 |  |  |
| Final portions | 3 | 2 | 6 | 2 |  |
| Values | $3 / 13=0.23$ | $2 / 13=0.15$ | $6 / 13=0.46$ | $2 / 13=0.15$ |  |

Note that 'Awl (increment of base number) was applied here since the portions add up to 13 . Thus, when determining the Values, each Final portion is divided by 13, not 12.
2. When Grandfather receives $\mathbf{1 / 3}$ of the residue

| Heirs | Wife | Grandfather | Full Sister | Paternal Sister |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 4$ | Residue |  |  |  |
| Base number | 4 |  |  |  |  |
| Portions | 1 | 1 | 1 | 1 |  |
| Final portions | 1 | 1 | 2 | 0 |  |
| Values | 0.25 | 0.25 | 0.5 | 0 |  |

With a base number of 4 , if the mother's share is taken away, the residue is 3 .
Grandfather $=1 / 3$ of $3=1$
" 2 Full Sisters" $=2 / 3$ of $3=2$, to be shared 1 each
As usual, Paternal Sister submits her share to Full Sister and ends up with nothing.

## 3. Muqasama

| Heirs | Wife | Grandfather | Full Sister | Paternal Sister |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 4$ | Residue |  |  |  |
| Base number | ${ }^{\|c\|} *$ |  |  |  |  |
| Portions | 1 | 16 |  |  |  |
| New base number |  |  |  |  |  |
| New portions | 4 | 6 | 3 | 3 |  |
| Final portions | 4 | 6 | 6 | 0 |  |
| Values | 0.25 | 0.38 | 0.38 | 0 |  |

Conclusion: Grandfather is advised to inherit by Muqasama since he will get 0.38 of the estate.

## CASE 3

1. When Grandfather takes $\mathbf{1 / 6}$ of the estate

| Heirs | Wife | Grandfather | Full Sister | 4 Paternal Sisters |
| :---: | :---: | :---: | :---: | :---: |
| Shares | 1/4 | 1/6 |  | 2/3 |
| Base number | 12 |  |  |  |
| Portions | 3 | 2 |  | * |
| New base number | 60 |  |  |  |
| New portions | 15 | 10 |  | 40 |
| Final portions | 15 | 10 | 30 | * |
| Newest base number | 240 |  |  |  |
| Newest portions | 60 | 40 | 120 | 5 each |
| Values | 0.25 | 0.17 | 0.5 | 0.02 each |

New base number $=$ number of heads of " 5 Full Sisters" x initial base number i.e. $5 \times 12=60$ " 5 Full Sisters" $=2 / 3$ of $60=40$. If Full Sister reverts back to her position and takes $1 / 2$ of the estate which is 30 , the residue of 10 cannot be shared by the 4 Paternal Sisters hence the need to determine newest base number.

Newest base number $=$ number of heads of 4 Paternal Sisters x 60 i.e. $4 \times 60=240$
2. When Grandfather receives $1 / 3$ of the residue

| Heirs | Wife | Grandfather | Full Sister | 4 Paternal Sisters |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 4$ | Residue |  |  |  |
| Base number | 4 |  |  |  |  |
| Portions | 1 | 1 | 2 |  |  |
| New base number | 10 |  |  |  |  |
| New portions | 5 | 5 |  | 0 |  |
| Final portions | 5 | 5 | 10 | 0 |  |
| Values | 0.25 | 0.25 | 0.5 | 0 |  |

3. Muqasama

| Heirs | Wife | Grandfather | Full Sister | 4 Paternal Sisters |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shares | $1 / 4$ | Residue |  |  |  |  |
| Base number | 4 |  |  |  |  |  |
| Portions | 1 | $*$ |  |  |  |  |
| New base number | 28 |  |  |  |  |  |
| New portions | 7 | 6 | 15 (3 each) |  |  |  |
| Final portions | 7 | 6 | 14 | $*$ |  |  |
| Newest base number | 112 |  |  |  |  | 1 each |
| Newest portions | 28 | 24 | 56 | 0.009 each |  |  |
| Values | 0.25 | 0.21 | 0.5 |  |  |  |

With new base number of 28, if the Full Sister takes her $1 / 2$ of the estate, the residue will be 1 which cannot be shared by the 4 Paternal Sisters.

Newest base number $=$ number of heads of 4 Paternal Sisters x 28 i.e. $4 \times 28=112$
Consequently, Grandfather is advised to choose $1 / 3$ of the residue since he will get 0.25 of the estate.

