

Assessing Large Language Models on Islamic Legal Reasoning: Evidence from Inheritance Law Evaluation

Abdessalam BOUCHEKIF Samer RASHWANI Heba Sbahi Shahd Gaben
Mutaz AL-KHATIB Mohammed GHALY

¹Hamad Bin Khalifa University, Qatar

abouchekif, srashwani, mghaly, malkhatib, sgaben, hsbahi}@hbku.edu.qa

Abstract

This paper evaluates the knowledge and reasoning capabilities of Large Language Models in Islamic inheritance law, known as *‘ilm al-mawārith*. We assess the performance of seven LLMs using a benchmark of 1,000 multiple-choice questions covering diverse inheritance scenarios, designed to test each model’s ability—from understanding the inheritance context to computing the distribution of shares prescribed by Islamic jurisprudence. The results reveal a significant performance gap: o3 and Gemini 2.5 achieved accuracies above 90%, whereas ALLaM, Fanar, LLaMA, and Mistral scored below 50%. These disparities reflect important differences in reasoning ability and domain adaptation. We conduct a detailed error analysis to identify recurring failure patterns across models, including misunderstandings of inheritance scenarios, incorrect application of legal rules, and insufficient domain knowledge. Our findings highlight the limitations of current models in handling structured legal reasoning and suggest directions for improving their performance in Islamic legal reasoning. Our code is available at https://github.com/bouchekif/inheritance_evaluation

1 Introduction

In recent years, the application of Large Language Models (LLMs) to Islamic domains has attracted growing interest in the NLP community. This progress has been driven by the emergence of open-source Arabic LLMs and the development of shared tasks targeting Islamic NLP. Models such as Falcon (Almazrouei et al., 2023), Jais (Sengupta et al., 2023), AceGPT (Huang et al., 2023), ArabianGPT (Koubaa et al., 2024), ALLaM (Bari et al., 2024), and Fanar (Abbas et al., 2025) have been pretrained on large-scale Arabic corpora including Quranic verses, Hadith, and fatwa archives, enabling new capabilities in religious text understanding. Several shared tasks have been proposed to bench-

mark LLMs on Islamic texts, such as Quranic QA (Malhas et al., 2022), (Rizqullah et al., 2023) and general Islamic knowledge retrieval (Qamar et al., 2023). (Sayeed et al., 2025) explored QA systems for ṭibb nabawī (Prophetic medicine) using LLaMA-3, Mistral-7B, and Qwen-2 combined with Retrieval-Augmented Generation (RAG), while (Alan et al., 2024) proposed MufasssirQAS, a RAG-based system trained on Turkish Islamic texts to improve transparency and reduce hallucinations in religious QA. (Rizqullah et al., 2023) introduced QASiNa QA dataset, derived from *Sirah Nabawiyah* texts in Indonesian, comparing traditional multilingual transformers (XLM-R, mBERT, IndoBERT) with GPT-3.5 and GPT-4. (Qamar et al., 2024) introduced a dataset of 73,000 non-factoid QA pairs covering Quranic Tafsir and Hadith. The study revealed a critical gap between automatic evaluation metrics (such as ROUGE) and human judgments. These results show that automatic evaluation metrics alone are not sufficient, and highlight the need for more robust evaluation methods that can better reflect the complexity and interpretive nature of Islamic religious texts. In (Aleid and Azmi, 2025), the authors released Hajj-FQA, a benchmark of 2,826 QA pairs extracted from 800 expert-annotated fatwas concerning the Hajj pilgrimage. More recently, the QIAS 2025 shared task (Bouchekif et al., 2025a) was introduced to evaluate LLMs on religious and legal reasoning through two subtasks: (1) *Islamic Inheritance Reasoning*, which involves computing inheritance shares based on Islamic jurisprudence; and (2) *Islamic Knowledge Assessment*, which covers core disciplines such as fiqh, Hadith, and tafsir, with early results reported in (Bouchekif et al., 2025b).

Despite these efforts, multiple studies have reported critical limitations in the performance of LLMs on Islamic content. For instance, (Mohammed et al., 2025) show that even advanced models like GPT-4 tend to produce factually incorrect or misleading

answers when applied to Islamic content. They identify three main issues: (i) misinterpretation of religious context, (ii) generation of unclear or unreliable answers not grounded in authoritative Islamic sources, and (iii) sensitivity to minor variations in question phrasing, often resulting in inconsistent outputs. Similarly, (Alnefaie et al., 2023) observed that GPT-4 has difficulty answering Quranic questions accurately, due to difficulties with classical arabic, semantic ambiguity, and misinterpretation of contextual meaning.

Early research on automating Islamic inheritance (hereafter IRTH) began with expert systems focused on calculating basic inheritance shares (Akkila and Naser, 2016). Later works incorporated intricate adjustments such as *ḥajb*, *ʿawl*, and *radd* (Tabassum et al., 2019). (Zouaoui and Rezeg, 2021) introduced a Arabic ontology for identifying heirs and calculating their inheritance shares (Tabassum et al., 2019). In this work, we evaluate seven LLMs on their ability to reason over inheritance problems, reporting both quantitative performance metrics and qualitative analyses, revealing specific reasoning failures as well as broader model limitations. This paper is organized as follows: Section 2 introduces the foundations of IRTH. Section 3 describes the dataset, while Section 4 details the experimental setup and results. In Section 5, we analyze the justifications that models provide for their answers. Finally, Section 6 concludes the paper with a discussion of future work.

2 Background on Islamic Inheritance Law

Islamic inheritance law involves intricate textual interpretation and structured legal reasoning grounded in the Quran, Prophetic tradition (Sunnah), and Islamic jurisprudence. It governs the distribution of the estate of a deceased person through a fixed legal framework that combines normative principles with precise arithmetic calculations. Solving inheritance problems requires a combination of cognitive, legal, and computational skills, including:

- Identifying familial relationships and considering legal conditions such as debts, bequests, and the sequence of deaths among relatives.
- Determining eligible heirs, including fixed-share heirs (*aṣḥāb al-furūd*) and residuaries (*ʿaṣabāt*), and correctly applying exclusion rules (*ḥajb*) based on valid justifications and

authentic scriptural evidence.

- Computing shares by deriving a common denominator and adjusting the distribution when necessary:
 - *Radd* (redistribution) is used when a surplus remains after initial allocation. This surplus is proportionally redistributed among the heirs, excluding spouses. *Example*: Wife ($1/4$) and full sister ($1/2$), leaving a surplus of $1/4$; after redistribution, the wife receives ($1/4$) and the sister receives ($3/4$).
 - *ʿAwl* (proportional reduction) is applied when the sum of assigned shares exceeds the estate. All shares are scaled down proportionally. *Example*: Father ($1/6$), mother ($1/6$), wife ($1/8$), and four daughters ($2/3$); the total exceeds 1. The denominator is adjusted to 27, and then the wife receives $3/27 = 1/9$.
- Addressing complex and exceptional scenarios, such as consecutive death scenarios (*munāsakha*) or juristic disputes like the *Akdariyya* case involving grandparents and siblings.
- Numerical precision in the final distribution, including the correct adjustment and fractional allocation¹.

Given its structured rules, mathematical computations, and reliance on Arabic jurisprudential sources, IRTH presents a real-world scenario for evaluating the reasoning abilities of LLMs.

3 Dataset Description

Our evaluation is based on the validation set of the QIAS 2025 Shared Task²(Bouchekif et al., 2025a). The dataset was constructed from Islamic religio-ethical advices (fatwas) collected from *IslamWeb*³. Each fatwa was automatically converted into multiple-choice questions (MCQ) using Gemini 2.5 Pro, then reviewed by four experts in Islamic studies to ensure both legal soundness and linguistic clarity. As part of the preprocessing phase, ambiguous questions were rephrased to guarantee a single, unambiguous interpretation. The answer

¹For more details about the terminology and rules of Islamic inheritance law, see “*Irth*,” in *Al-Mawsūʿa al-Fiqhiyya* (The Kuwaitan Encyclopedia of Fiqh). Kuwait: Wazārat al-Awqāf wa-al-Shuʿūn al-Islamiyya. 45 Vols. 1984-2007. Vol. 3, Pp. 17-79.

²<https://sites.google.com/view/qias2025>

³<https://www.islamweb.net/>

choices were also revised to eliminate semantic and numerical redundancies, such as equivalent options (e.g. 1/2 and 2/4). Each MCQ presents six answer choices, with a single correct answer. These questions assess a model’s ability to identify eligible heirs, apply fixed-share rules, and reason through complex inheritance logic. The dataset has two levels of difficulty: 500 MCQs labeled as *Beginner* and 500 *Advanced*, reflecting increasing complexity in both legal reasoning and mathematical computation.

- *Beginner*: identifying eligible heirs, their basic shares, and non-eligible heirs.
- *Advanced*: handling multiple heirs, residuary shares, partial exclusions, multi-generational cases, fixed estate constraints, and intricate fractional distributions.

Each example is evaluated based on its level of difficulty—either beginner or advanced. This approach allows us to distinguish between models lacking foundational knowledge and those capable of solving complex cases that require deeper legal reasoning. It enables a more precise analysis of limitations in legal reasoning capacity across evaluated models.

4 Experiments and Results

4.1 Experimental Setup

We evaluate seven LLMs in a zero-shot setting using Arabic prompts (see Appendix A.2), without any task-specific fine-tuning. The prompt clearly defines the task, presents a multiple-choice question with its options, and instructs the model to select the correct answer and provide a justification. This enables us to assess reasoning and verify that its conclusions are based on logical inferences rather than stochastic guesses. The evaluated models include Arabic-specialized LLMs optimized for Arabic language tasks, open-source multilingual models, and commercial multilingual models, with sizes ranging from 7 to over 100 billion parameters (exact sizes of the commercial models are not publicly disclosed). The Arabic-focused models include Fanar (*Islamic-RAG*⁴), ALLaM-7B⁵, and Mistral-Saba-24B⁶, a model that has achieved

⁴ Accessible via a free public API: <https://api.fanar.qa/request/en>

⁵ An open-source Arabic model hosted on Hugging Face: <https://huggingface.co/Abdelaali-models/ALLaM-7B-Instruct-preview>

⁶ Available via the Groq platform: <https://console.groq.com/keys> or Mistral’s official website: <https://>

competitive performance on standard Arabic benchmarks. We also include LLaMA 3 70B⁷, a powerful open-source multilingual model developed by Meta. As for commercial LLMs, we evaluate three LLMs: Gemini 2.5 (flash-preview), OpenAI’s o3 and GPT-4.5. Gemini and o3 represent the state of the art in reasoning capabilities, while GPT-4.5 is widely regarded as one of the most advanced models in the GPT series.

4.2 Overall Performance

Table 1 summarizes model accuracy across the three difficulty levels. The o3 model achieved the highest overall accuracy (93.4%), followed closely by Gemini (90.6%). GPT-4.5 achieved 74.0% accuracy, positioning it between models with advanced reasoning capabilities and those relying on heuristic inference. Fanar, ALLaM, and LLaMA scored below 50%, revealing a significant performance gap. The underperformance of ALLaM and Fanar, may be partly due to currently available smaller configurations (e.g., 7B and 9B). Since no larger versions of these models are publicly available, we evaluate them in their current smaller versions, with a focus on end-task performance and reasoning.

All models performed better on Beginner level questions, which typically involve fewer heirs and simpler distribution rules. The performance degradation at the Advanced level was particularly evident for Arabic-focused models. For example, ALLaM achieved 58.0% accuracy on Beginner cases but dropped to just 27.8% on Advanced ones. This highlights limited capabilities in handling complex inheritance scenarios. In contrast, reasoning models (i.e. o3 and Gemini 2.5) maintained high performance across both levels, suggesting superior reasoning capabilities when handling complex cases.

4.3 Evaluation Criteria

To better understand model limitations, we conducted a targeted error analysis on a subset of 142 multiple-choice questions. This subset consists of questions that were incorrectly answered by all low-performing models (i.e., those scoring below 50%). To guide this evaluation, we categorize errors into two main types: foundational and complex, based on expert in IRTD domain. This structure allows for a more precise distinction between errors caused by legal misunderstanding and those requiring ad-

admin.mistral.ai/organization/api-keys

⁷ We access LLaMA 3 70B via the Groq API: <https://console.groq.com/keys>.

Model	Overall	Beginner	Advanced
o3	93.4	94.4	92.4
Gemini 2.5	90.6	91.6	89.6
GPT-4.5	74.0	86.8	61.2
LLaMA 3	48.8	57.8	39.8
Fanar 7B	48.1	60.4	35.8
Mistral	44.5	58.6	30.4
ALLaM 7B	42.9	58.0	27.8

Table 1: Accuracy (%) for each model across difficulty levels.

vanced reasoning and computation. Our analysis focused on three open-source models: ALLaM, LLaMA, and Fanar⁸. For comparison, we also included Gemini, which answered only 13 out of the 142 questions incorrectly. This subset was reviewed by Islamic studies experts who analyzed the justifications and annotated the corresponding error types.

4.3.1 Foundational Errors (FD)

- **Comprehension Error (CE):** Misinterpretation of the problem statement, such as misidentifying family relationships or neglecting legally relevant information (e.g., debts, bequests (*waṣāyā*), or sequence of deaths).
- **Error in Applying Normative Rules (ENR):** Incorrect legal analysis, including heir misclassification (e.g., *aṣḥāb al-furūd*, *ʿaṣabāt*), misapplication of exclusion rules (*ḥajb*), or incorrect scriptural citation.
- **Basic Computational Error (BCE):** Simple arithmetic mistakes or hallucinated numerical values in the final distribution.

4.3.2 Complex Errors (CPLX)

- **Error in Calculatory Adjustment (ECA):** Failure to perform advanced mathematical operations required for estate division, including:
 - **Adjustment (*Taṣḥīḥ*):** Incorrect modification of the base denominator.
 - **Redistribution (*Radd*):** Misallocation of estate surplus.
 - **Proportionate Reduction (*ʿAwl*):** Failure to proportionally reduce all shares when total claims exceed the estate.

⁸The Fanar model is publicly available on Hugging Face <https://huggingface.co/QCRI/Fanar-1-9B>. We used the Islamic-RAG version, which is specifically adapted to the Islamic domain and accessible via a free public API.

- **Error in Resolving Exceptional and Disputed Cases (ERE):** Inability to resolve non-standard or disputed cases (e.g., involving grandfather and siblings, or successive deaths (*munāsakha*)).

Type	ALLaM	Fanar	LLaMA	Gemini
ENR	38.0	47.9	44.4	4.9
CE	4.2	4.9	0.7	0.0
BCE	3.5	3.5	4.2	0.7
FD Total	45.8	56.3	49.3	5.6
ECA	54.2	43.7	50.7	9.2
CPLX Total	54.2	43.7	50.7	9.2

Table 2: Distribution of error types across models (expressed as percentages) based on 142 jointly incorrect answer selection. **FD**: Foundational Errors. **CPLX**: Complex Errors.

4.4 Results analysis

As shown in Table 2, open-source models fail in the foundational elements of IRTH, such errors represent 45.8% of the wrong answers selected by ALLaM, 56.3% by Fanar, and 49.3% by LLaMA, mainly due to ENR-related issues. This finding is particularly noteworthy given that the questions were derived from fatwas on IslamWeb, a data source presumably included in the training corpora of the evaluated models.

4.4.1 Foundational Errors

Given the significant gap between commercial and open-source models in handling foundational errors, we analyze them separately. This distinction allows us to better understand the recurrent weaknesses specific to each model category, particularly in tasks that require accurate identification of heirs, correct application of fixed-share rules, and adherence to normative principles of Islamic jurisprudence.

In Open-Source Models • Errors in justification and scriptural citation: Some models base their reasoning on fabricated Quranic verses or prophetic narrations that do not appear in any canonical collection, often resulting in incorrect distribution of inheritance shares. As illustrated in the first example of Table 3), the model incorrectly assigned the wife’s share as one-fourth, referencing the verse “وَلَهُنَّ رِيعٌ مَّا اكْتَسَبْنَ وَلَكُمْ مَّا اكْتَسَبْتُمْ” (“To them belongs a quarter of what they earned, and to you what you

#	Question	Answer	Model
1	توفيت عن زوج وابنين وبنتين: كم عدد أسهم البنت الواحدة من مجموع أسهم التركة؟	البنت الواحدة تحصل على سهم واحد من التركة، بينما تحصل البنات على نصف ما يتبقى بعد إعطاء الزوج نصف التركة، كما جاء في القرآن الكريم: ﴿وَلَهُنَّ رُبُعٌ مَّا اكْتَسَبْنَ وَلَكُلٌّ مَّا اكْتَسَبْتُمْ﴾ (النساء: 23)، وبالتالي فإن البنت الواحدة تحصل على سهم واحد، والبنين يتقاسمان الباقي.	LLaMA
2	توفي عن أخ شقيق عدد 1، بنت عدد 2، أخت شقيقة عدد 1 كم عدد أسهم كل بنت؟	إذا كان هناك أخ شقيق واثنان من البنات والأخت الشقيقة، فالفرض يكون للأخ الشقيق نصف التركة والباقي للبنات بالتساوي. بما أن الأخ يأخذ نصف التركة، يتبقى للنصف الآخر أي ما يعادل ربع التركة لكل واحدة من البنتين. لذلك، يحصل كل بنت على سهمان. وهذا مستند إلى الآية القرآنية ﴿فَإِنْ كَانَ لَهُ إِخْوَةٌ فَلِأُمِّهِ السُّدُسُ﴾ (النساء: 11) والتي تشير ضمناً إلى تقسيم باقي التركة بين الأقارب الذكور والإناث حسب أحكام الموارث الإسلامية المعروفة. ولكن بناءً على وجود الأخت الشقيقة والاخ الشقيق والبنات، يتم تطبيق قاعدة "الباقي" حيث يأخذ الاخ الشقيق نصف التركة ويقسم الباقي بين البنات بالتساوي.	Fanar
3	توفي عن ابنه الوحيد، وأمه، وأم والده، وترك مبلغ 0007 دولار. كم نصيب أمه من المبلغ؟	وفقاً للقرآن الكريم، إذا ترك الميت ابناً وحيداً، فلا يرث أحد غيره، حيث يقول الله تعالى في سورة النساء الآية 11: ﴿فَإِنْ كَانَ لَهُ وَلَدٌ فَلَهُ النِّصْفُ﴾. لذلك، لن ترث الأم أي شيء في هذه الحالة. لكن يجب التنويه أن هذا يتعلق بالنصيب الشرعي وليس القسمة المالية الحرفية للأموال التي ذكرتها في السؤال والتي قد تتغير بناءً على قوانين الدولة الخاصة بتوزيع التركة. ولكن حسب الأحكام الشرعية الإسلامية، لا ترث الأم عندما يكون هناك ابن ذكر حي.	Fanar
4	توفيت عن زوج، أم، 4 أخ شقيق، 3 أخ من الأم. ما نصيب الإخوة للأم؟	إذا لم يترك الميت من الورثة إلا من ذكر، فإن لأمه السدس فرضاً لوجود جمع من الإخوة، قال الله تعالى: ﴿فَإِنْ كَانَ لَهُ إِخْوَةٌ فَلِأُمِّهِ السُّدُسُ﴾ (النساء: 11). وفي هذه الحالة، يوجد جمع من الإخوة (4 أخ شقيق و3 أخ من الأم)، لذا يكون نصيب الأم السدس.	Fanar
5	توفي عن: أخ شقيق (العدد 2)، بنت (العدد 4)، أخت شقيقة (العدد 1). كم سهماً لكل واحدة من البنات؟	في حالة وجود بنت واحدة وأخت شقيقة واحدة، فإن الأخت الشقيقة تأخذ نصف التركة، والبنت تأخذ النصف الآخر. إذا كان هناك أكثر من بنت، فإنهن يشتركن في النصف بالتساوي. في هذه الحالة، يكون لكل بنت سهم واحد من النصف، أي أن لكل بنت سهمين من التركة الكاملة.	ALLaM
6	توفيت عن زوج، أم، 4 أخ شقيق، 3 أخ من الأم. ما نصيب الإخوة للأم؟	قال الله تعالى في سورة النساء: ﴿وَلِلَّائِمَةِ كُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ مِمَّا تَرَكَ إِنْ كَانَ لَهُ وَلَدٌ﴾ (النساء: 11). في هذه الحالة، الأم والأب يرثان السدس، والإخوة للأم يرثون السدس أيضاً.	ALLaM
7	توفي عن زوجة وبنت وأم وشقيقين وشقيقة، وترك أربعة وعشرين ألفاً. كم تأخذ الزوجة من هذا المبلغ؟	الزوجة تأخذ الثمن إذا لم يكن للميت ولد، لقوله تعالى: "وَلِكُلِّ نِسَاءٍ مِّمَّا تَرَكَ أَزْوَاجُكُمْ إِنْ لَمْ يَكُنْ لَهُنَّ وَلَدٌ" (النساء: 21). وبما أن الزوجة لم يكن لها ولد، فإن الثمن هو ستة آلاف.	ALLaM

Table 3: Examples of open-source models errors

#	Question	Answer
8	في حكم ميراث الخنثى المشكل الذي يختلف إرثه باختلاف تقديره ذكراً أو أنثى: ما هو مذهب المالكية في توريث الخنثى المشكل في هذه الحالة إذا ورث بهما متفاضلاً؟	يرى المالكية في حالة الخنثى المشكل الذي يختلف إرثه باختلاف تقديره ذكراً أو أنثى، وتفاضل إرثه وإرث من معه من الورثة، أن يعامل كل من الخنثى ومن معه بالأضر (الأقل نصيباً) لضمان عدم تجاوز الحق المتيقن لكل وارث، وذلك بناءً على مبدأ عدم صرف المال بالشك.
9	توفي عن ابن وإخوة ما حكم ميراث الابن المسلم من أبيه النصراني إذا مات الأب قبل إسلام الابن؟	في حالة وجود بنت واحدة وأخت شقيقة واحدة، فإن الأخت الشقيقة تأخذ نصف التركة، والبنت تأخذ النصف الآخر. إذا كان هناك أكثر من بنت، فإنهن يشتركن في النصف بالتساوي. في هذه الحالة، يكون لكل بنت سهم واحد من النصف، أي أن لكل بنت سهمين من التركة الكاملة.

Table 4: Examples of Gemini errors

earned”) and attributing it to Sūrat al-Nisā³ (4:32). This verse is entirely fabricated and does not exist in the Quran. Such hallucinations were frequently observed across open-source models, representing a serious issue in Islamic context.

• **Errors in Identifying Fixed Shares:** Selected open-source Arabic models misapplied fixed-share rules for primary heirs (e.g., parents, spouses, daughters). For instance, in Example 2, Fanar failed

to allocate two-thirds of the estate to the two daughters, even though this share is explicitly prescribed in the Quranic verse: ﴿يُوصِيكُمُ اللَّهُ فِي أَوْلَادِكُمْ لِلذَّكَرِ مِثْلُ لِّلْأُنثَىٰ وَلَٰكِن لِّمَا تَرَكُوا لِأُولَادِكُمْ لِلذَّكَرِ مِثْلُ لِّلْأُنثَىٰ﴾ (النساء: 11). وَاِحْدَةٌ فَلَهَا النِّصْفُ (4:11).

Similarly, as shown in Example 3, Fanar erroneously denied the mother her fixed share, based on the incorrect premise that the son’s presence excludes all other heirs. This reasoning directly

contravenes the explicit Quranic stipulation that a mother receives one-sixth of the estate if the deceased has offspring, as stated in: ﴿فَإِنْ كَانَ لَهُ وَلَدٌ فَلَهَا مِنْهُ السُّدُسُ﴾ (4:11).

- **Comprehension Error:** This type of error occurs when models fail to correctly determine which heir the question is referring to. As shown in Example 4, the model interpreted the query as concerning the mother’s share, whereas it explicitly asked about the maternal brothers. Consequently, the model produced a justification that was irrelevant to the question, ultimately resulting in a wrong answer.

- **Identifying eligible Heirs:** Open-source LLMs often make errors at the initial step of inheritance distribution—identifying the eligible heirs—which subsequently leads to incorrect share assignments. These errors typically take two forms: the omission of rightful heirs and the inclusion of individuals not mentioned in the scenario. For instance, in Example 5, the model failed to recognize the brother as a residuary heir, excluding him entirely from the estate. Conversely, in Example 6, ALLaM erroneously included the father as an heir, despite his absence from the question. This resulted in an unjustified reallocation of shares, reducing the portions assigned to the rightful heirs.

- **Basic Computational Error:** In some cases, models correctly identify the eligible heirs and apply the relevant inheritance rules, yet still produce incorrect results due to basic computational errors. For example, in question 7, ALLaM correctly stated that the wife is entitled to one-eighth of the estate, as the deceased left behind a child. However, they miscalculated one-eighth of 24,000 as 6,000, whereas of the correct value of 3,000.

In Commercial Models Gemini demonstrates strong capabilities in understanding inheritance questions, accurately interpreting familial relationships, identifying eligible heirs, and correctly applying fixed-share rules in accordance with Islamic jurisprudence. Its responses are generally well-structured, legally sound, and supported by appropriate scriptural references. However, Gemini occasionally fails on questions that require a nuanced understanding of intra-madhab distinctions. For instance, as shown in Example 8, the model was asked to apply the Mālikī position regarding the inheritance of a *khunthā mushkil*—an intersex in-

dividual whose gender cannot be definitively identified. In this case, inheritance shares vary depending on the gender designation. Instead of referencing the Mālikī view, Gemini erroneously justified its answer using Shāfi‘ī jurisprudence. This highlights a broader limitation in the model’s ability to accurately distinguish between the rulings of different Islamic legal schools when such distinctions are legally consequential.

Despite its overall competence, Gemini occasionally showed weaknesses in nuanced scenarios. For instance, it failed to correctly differentiate between inheritance scenarios involving conversion to Islam before or after death, as illustrated in Example 9. In this case, since both the father and the son were non-Muslims before the father’s death, the son is deemed a legitimate heir according to all scholars.

4.4.2 Complex Errors

Even when models accurately apply the inheritance rules and identify eligible heirs, they may still fail at later stages when faced with complex scenarios, such as those requiring the application of complex rules such as proportional reduction (*‘awl*) and residual reallocation (*radd*).

- **Distribution Denominator:** Most errors (50%) committed by models involved miscalculations related to correcting the *distribution denominator* according to the number of heirs. This issue likely arises from their failure to appreciate the mathematical necessity of such corrections, a process historically used to avoid fractions and ambiguity before calculators were commonplace. While Gemini appeared to recognize the principle, but applied it inconsistently, as illustrated in Example 10.

Open-source models encountered significant difficulties with *distribution denominator* corrections, frequently becoming confused or trapped in calculation loops. They often attempted to calculate denominators prematurely, as shown in Example 11, revealing poor understanding of the sequential calculation steps required in inheritance law.

- **Redistribution (*radd*):** Gemini occasionally failed to redistribute leftover shares after the initial allocation, as illustrated in Example 12. In that case, the full sister initially received 50% of the shares, with 25% of the estate remaining. This should go to the heirs other than spouses—in this case, the full sister—bringing her total share to 75%. Open-source models consistently failed in such cases, largely because initial distribution er-

#	Question	Answer
10	توفي عن: (أخ شقيق) العدد 3، (ابن أخ شقيق) العدد 3، (بنت) العدد 4، (زوجة) العدد 1، (أخت شقيقة) العدد 5. كم عدد أسهم الزوجة من أصل التركة المصحح؟	للزوجة الثمن لوجود الفرع الوارث (البنات)، لقوله تعالى: ﴿فَإِنْ كَانَ لَكُم مِّنْ وَلَدٍ فَلَهُنَّ الثَّمَنُ مِمَّا تَرَكْتُمْ﴾. أصل المسألة (قبل التصحيح) يكون من مضاعف مقامي نصيب الزوجة (8) ونصيب البنات (3)، وهو 24. سهم الزوجة من هذا الأصل هو الثمن، أي $\frac{1}{8}$ من 24 يساوي 3. (ملاحظة: المسألة تحتاج تصحيحاً لوجود باقٍ للعصبة لا ينقسم على رؤوسهم، ولكن هذا التعليل يوضح كيفية الوصول إلى أحد الخيارات المعطاة وهو سهم الزوجة قبل التصحيح).
11	توفي عن: (أخ شقيق) العدد 3، (ابن أخ شقيق) العدد 3، (بنت) العدد 4، (زوجة) العدد 1، (أخت شقيقة) العدد 5. كم مجموع عدد أسهم البنات الأربع من أصل التركة المصحح؟	مجموع عدد أسهم البنات الأربع من أصل التركة المصحح هو 30 سهماً. قال الله تعالى في سورة النساء: ﴿وَأُولُوا الْأَرْحَامِ بَعْضُهُمْ أَوْلَىٰ بِبَعْضٍ فِي كِتَابِ اللَّهِ مِنَ الْمُؤْمِنِينَ وَالْمُهَاجِرِينَ إِلَّا أَنْ تَفْعَلُوا إِلَىٰ أَوْلِيَائِكُمْ مَعْرُوفًا كَانَ ذَلِكَ فِي الْكِتَابِ مَسْطُورًا﴾ (الآية 7)
12	توفي عن زوجة واحدة وأخت شقيقة واحدة، ما هو النصيب النهائي لكل وارث من التركة؟	الزوجة ترث الربع لعدم وجود الفرع الوارث لقوله تعالى: ﴿فَإِنْ لَمْ يَكُنْ لَكُم مِّنْ وَلَدٍ فَلَهُنَّ الرُّبُعُ مِمَّا تَرَكْتُمْ﴾. والأخت الشقيقة الواحدة ترث النصف إذا انفردت ولم يكن هناك أصل وارث ذكر ولا فرع وارث، لقوله تعالى: ﴿إِنْ أَمْرُهُ هَلَكَ لَيْسَ لَهُ وَلَدٌ وَلَهُ أُخْتُ فَلَهَا نِصْفُ مَا تَرَكَ﴾.
13	توفيت عن زوج وأب وأم وبنت، إلى كم تعول هذه التركة؟	في هذه المسألة، المسألة تُعال إلى 12، وذلك لأن المسألة تُعال إلى 12 في حال وجود الزوج والأب والأم والبنت، حيث يُضاف الزوج إلى المسألة، فيصبح عدد الرؤوس 5 (3 + 1 + 1) وتُنقسم التركة على 5. قال الله تعالى في سورة النساء: ﴿فَرِيشَةٌ مِّنَ اللَّهِ إِنَّ اللَّهَ كَانَ عَلِيمًا حَكِيمًا﴾ (النساء: 11)
14	توفيت عن زوج وأبناء وبنات هل يجوز للأُم تفضيل أحد أولادها في الميراث؟	لأن قسمة الميراث فريضة مقدرة من الله سبحانه وتعالى بنصوص قطعية في القرآن الكريم، ولا يجوز لأحد تغيير هذه القسمة أو تفضيل بعض الورثة على بعض فيها. قال تعالى في ختام آيات الموارث: (فريضة من الله إن الله كان عليماً حكيماً) [النساء: 11].

Table 5: Examples of Gemini’s Complex Errors.

rors made it impossible to identify residual shares requiring redistribution.

• **Proportionate Reduction (‘awl):** Gemini consistently handled proportionate reduction scenarios accurately, clearly explaining the underlying principle. Conversely, smaller models consistently failed in proportionate reduction calculations, indicating a fundamental misunderstanding of this critical inheritance concept, even when the need for ‘Awl was explicitly stated in the question. ALLaM in Example 13, arbitrarily defined the ‘Awl denominator without first computing the individual shares and their common denominator, leading to an invalid final distribution.

• Resolving Exceptional and Disputed Cases:

In cases involving juristic disagreement, all models consistently defaulted to the majority opinion, likely due to a training data bias that favors definitive answers over nuanced scholarly disagreement (*ikhtilāf*). Consequently, they failed to acknowledge valid minority views, as shown in Example 14. The optimal response would be to note Imam Ahmad’s less common but valid view: parents may give more to certain heirs during their lifetime—such as those who are very poor or ill—even though this will ultimately impact the total estate.

5 Analysis of Correct Answers

While standard evaluation focuses on answer accuracy, this is insufficient in religious legal contexts, particularly in inheritance law, where the validity of the underlying reasoning is important. A correct prediction alone may mask significant reasoning flaws if the accompanying explanation is inadequate, irrelevant, or fabricated. To further investigate the robustness of the models’ reasoning, we manually analyzed the justifications of 40 instances where models produced correct answers. Our analysis revealed that even when lower-performing models arrived at the correct answer, their justifications often reflected the same errors discussed in section 4.4.1. In terms of comprehension, Fanar presumed the presence of offspring, although none were mentioned in the question, as shown in Example 15. Justification errors were also common; models cited irrelevant or fabricated Quranic verses and hadiths, such as LLaMA referencing a non-existent Hadith, see Example 16. Moreover, we observed mistakes in the application of normative rules. In Example 17, LLaMA split half the shares between brothers and sisters and gave two-thirds to daughters, while the correct approach is to grant daughters a fixed two-thirds share and allocate the remainder to brothers and sisters.

#	Question	Answer	Model
15	توفي عن: أم، زوجة، أخوين شقيقين، خمس أخوات شقيقات، ثلاثة إخوة من الأب، وأخت من الأب. ما نصيب الأم؟	وفقاً للمعلوماتي، فإن للأم السدس فرضاً لوجود الفرع الوارث، كما قال تعالى: ﴿وَلِأَبَوَيْهِ لِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ مِمَّا تَرَكَ إِن كَانَ لَهُ وَلَدٌ﴾ [النساء: 11]. وبالتالي، يكون نصيب الأم في هذه الحالة هو السدس.	Fanar
16	توفي عن 4 أخ شقيق، 1 أخ من الأم، 1 أم، 4 بنت، 1 زوجة، 2 أخت شقيقة. ما نوع إرث الأخ الشقيق؟	التعليل: يرث الأخ الشقيق بالتعصيب إذا لم يكن هناك وارث ذكر أقرب منه، كما جاء في الحديث النبوي: "الأخ الشقيق يرث ميراث الأخ الشقيق"، وبالتالي يرث الأخ الشقيق بالتعصيب إذا لم يكن هناك وارث ذكر أقرب منه.	LLaMA
17	توفي عن: أخ شقيق (العدد 2)، بنت (العدد 4)، أخت شقيقة (العدد 1). ما هو نصيب البنات الأربع؟	يرث الأخ الشقيق والأخت الشقيقة والأبناء، فالأخ الشقيق يأخذ سهم الأب (النصف) والأخت الشقيقة تأخذ النصف، وبالتالي يبقى للبنات الثلثان (النصف الباقي) لأن النصاب هو الورثة، والأخ الشقيق والأخت الشقيقة يأخذون نصيبهما، وتبقى البنات على الباقي.	LLaMA

Table 6: Examples of correct answers accompanied by incorrect justifications.

As shown in Table 7, foundational errors in comprehension and rule application were present in 27.5% of ALLaM’s justifications, 32.5% of Fanar’s, and 47% of LLaMA’s. In stark contrast, Gemini consistently produced sound justifications, demonstrating accurate calculations, valid legal reasoning, and correct citations. This disparity underscores that performance evaluations must account for reasoning quality, as accuracy alone provides an incomplete and potentially misleading assessment of a model’s capabilities in this domain.

Type	ALLaM	Fanar	LLaMA
ENR	22.5 %	22.5%	44.5%
CE	5%	10%	2.5%
BCE	-	-	-
FD Total	27.5%	32.5%	47%
ECA	-	-	-
CPLX Total	-	-	-

Table 7: Distribution of error types in model justifications for correct answers. The ECA category is omitted since no instances were observed in the 142 analyzed cases.

6 Conclusion

This paper addresses estate distribution according to Islamic inheritance law using seven distinct LLMs. Due to the task’s complexity, models with reasoning capabilities, such as Gemini 2.5 and o3, demonstrated high performance, achieving accuracy rates of 90.6% and 93.4%, respectively. Models without reasoning capability, such as GPT-4.5—which is considered one of the most powerful commercial OpenAI models—achieved moderate results (74%). Conversely, models like Jais, Mistral, and LLaMA, despite strong performance on several

Arabic language benchmarks, showed significantly lower accuracy, scoring below 50%, reflecting their limitations in legal reasoning. Our evaluations highlighted a clear gap between models with reasoning abilities and those without. This gap was particularly evident among ALLaM, Fanar, LLaMA, and Mistral, which consistently struggled with identifying complex familial relationships, evaluating diverse inheritance scenarios, and correctly executing corrective calculations such as redistribution (*Radd*) and proportionate reduction (*%Awl*). Moreover, we observed that even when models selected the correct option, their underlying reasoning was often inaccurate, inconsistent, or legally unsound. Future research should focus on solving the inheritance problem end-to-end in realistic scenarios. This involves developing agentic AI systems that can reason step by step with transparency, rigorously adhere to legal rules, and robustly address exceptional inheritance scenarios. Achieving this goal requires high-quality datasets explicitly designed to support structured legal reasoning, developed in close collaboration with domain experts in Islamic law.

Acknowledgments

This work was supported by the Qatar Research, Development, and Innovation Council (QRDI) under the ARG grant *ARG01-0524-230318*.

References

Ummar Abbas, Mohammad Shahmeer Ahmad, Firoj Alam, Enes Altinisik, Ehsannedin Asgari, Yazan Boshmaf, Sabri Boughorbel, Sanjay Chawla, Sham-mur A. Chowdhury, Fahim Dalvi, Kareem Darwish, Nadir Durrani, Mohamed Elfeky, Ahmed K. Elmagmid, Mohamed Y. Eltabakh, Masoomali Fatehkia,

- Anastasios Fragkopoulos, Maram Hasanain, Majd Hawasly, and 22 others. 2025. [Fanar: An arabic-centric multimodal generative AI platform](#). *arXiv preprint*, arXiv:2501.13944.
- Alaa N Akkila and Samy S Abu Naser. 2016. Proposed expert system for calculating inheritance in islam. Technical report.
- Ahmet Yusuf Alan, Enis Karaarslan, and Ömer Aydin. 2024. A rag-based question answering system proposal for understanding islam: Mufasssirqas Ilm. *arXiv preprint arXiv:2401.15378*.
- Hayfa A Aleid and Aqil M Azmi. 2025. Hajj-fqa: A benchmark arabic dataset for developing question-answering systems on hajj fatwas: H. aleid and a. azmi. *Journal of King Saud University Computer and Information Sciences*, 37(6):135.
- Ebtesam Almazrouei, Hamza Alobeidli, Abdulaziz Alshamsi, Alessandro Cappelli, Ruxandra Cojocaru, Mérouane Debbah, Étienne Goffinet, Daniel Hesslow, Julien Launay, Quentin Malartic, and 1 others. 2023. The falcon series of open language models. *arXiv preprint arXiv:2311.16867*.
- Sarah Alnefaie, Eric Atwell, and Mohammad Ammar Alsalka. 2023. Is gpt-4 a good islamic expert for answering quran questions? In *Proceedings of the 35th Conference on Computational Linguistics and Speech Processing (ROCLING 2023)*, pages 124–133.
- M. Saiful Bari, Yazeed Alnumay, Norah A. Alzahrani, Nouf M. Alotaibi, Hisham A. Alyahya, Sultan Alrashed, Faisal Mirza, Shaykhah Alsubaie, Hassan A. Alahmed, Ghadah Alabduljabbar, Raghad Alkhatran, Yousef Almushayqih, Raneem Alnajim, Salman Alsubaihi, Maryam Al Mansour, Majed Alrubaian, Ali Alammari, Zaki Alawami, Abdulmohsen AlThubaity, and 6 others. 2024. [Allam: Large language models for arabic and english](#). *arXiv preprint arXiv:2407.15390*.
- Abdessalam Boucekif, Samer Rashwani, Mohammed Ghaly, Mutaz Al-Khatib, Emad Mohamed, Wajdi Zaghouani, Heba Sbahi, Shahd Gaben, and Aiman Erbad. 2025a. Qias 2025: Overview of the shared task on islamic inheritance reasoning and knowledge assessment. In *Proceedings of The Second Arabic Natural Language Processing Conference, ArabicNLP 2025, Suzhou, China, November 5–9, 2025*. Association for Computational Linguistics.
- Abdessalam Boucekif, Samer Rashwani, Heba Sbahi, Shahd Gaben, Mutaz Al-Khatib, and Mohammed Ghaly. 2025b. [Assessing large language models on islamic legal reasoning: Evidence from inheritance law evaluation](#). *Preprint*, arXiv:2509.01081.
- Huang Huang, Fei Yu, Jianqing Zhu, Xuening Sun, Hao Cheng, Dingjie Song, Zhihong Chen, Abdulmohsen Alharthi, Bang An, Juncai He, and 1 others. 2023. Acegpt, localizing large language models in arabic. *arXiv preprint arXiv:2309.12053*.
- Anis Koubaa, Adel Ammar, Lahouari Ghouti, Omar Najar, and Serry Sibae. 2024. Arabiangpt: Native arabic gpt-based large language model. *arXiv preprint arXiv:2402.15313*.
- Rana Malhas, Watheq Mansour, and Tamer Elsayed. 2022. [Qur’an QA 2022: Overview of the first shared task on question answering over the holy qur’an](#). In *Proceedings of the 5th Workshop on Open-Source Arabic Corpora and Processing Tools*, pages 79–87, Marseille, France. European Language Resources Association.
- Marriyam Yahya Mohammed, Sama Ayman Ali, Salma Khaled Ali, Ayad Abdul Majeed, and Ensaf Hussein Mohamed. 2025. Aftina: enhancing stability and preventing hallucination in ai-based islamic fatwa generation using llms and rag. *Neural Computing and Applications*, pages 1–26.
- Faiza Qamar, Seemab Latif, and Rabia Latif. 2024. A benchmark dataset with larger context for non-factoid question answering over islamic text. *arXiv preprint arXiv:2409.09844*.
- Syed Qamar and 1 others. 2023. A benchmark dataset with larger context for qa over islamic text. *arXiv preprint*.
- Muhammad Razif Rizqullah, Ayu Purwarianti, and Alham Fikri Aji. 2023. Qasina: Religious domain question answering using sirah nabawiyah. In *2023 10th International Conference on Advanced Informatics: Concept, Theory and Application (ICAICTA)*, pages 1–6.
- Mohammad Amaan Sayeed, Mohammed Talha Alam, Raza Imam, Shahab Saquib Sohail, and Amir Husain. 2025. From rag to agentic: Validating islamic-medicine responses with llm agents. *arXiv preprint arXiv:2506.15911*.
- Neha Sengupta, Sunil Kumar Sahu, Bokang Jia, Satheesh Katipomu, Haonan Li, Fajri Koto, William Marshall, Gurpreet Gosal, Cynthia Liu, Zhiming Chen, and 1 others. 2023. Jais and jais-chat: Arabic-centric foundation and instruction-tuned open generative large language models. *arXiv preprint arXiv:2308.16149*.
- Sadia Tabassum, AHM Hoque, Sharaban Twahura, and Mohammad Osiur Rahman. 2019. Developing an islamic farayez system applying software engineering. *Jurnal Kejuruteraan*, 31(1):25–38.
- Samia Zouaoui and Khaled Rezeg. 2021. Islamic inheritance calculation system based on arabic ontology (arafamonto). *Journal of King Saud University-Computer and Information Sciences*, 33(1):68–76.

A Appendix

A.1 Models Evaluated

Table 8 summarizes the models used in our evaluation, including their type and version.

Model	Language	Type	Size	Version
Fanar-1-9B	Arabic-focused	Open-source	9B	Islamic-RAG
ALLaM-7B	Arabic-focused	Open-source	7B	ALLaM-7B-Instruct-preview
Mistral-Saba	Arabic-focused	Open-source	24B	Saba
LLaMA-3.3-70B	Multilingual	Open-source	70B	Llama-3.3-70B-Instruct
Gemini 2.5	Multilingual	Commercial	–	Flash-preview
OpenAI o3	Multilingual	Commercial	–	o3
GPT-4.5	Multilingual	Commercial	–	4.5

Table 8: Summary of models and their versions evaluated in this study. “–” denotes cases where version information is not publicly available.

A.2 Prompt Template

We designed a structured prompt to guide models in solving Islamic inheritance problems. The prompt required models not only to output the selected answer option but also to generate a concise justification in Arabic. Incorporating a justification enables fine-grained evaluation, as it allows us to distinguish between cases where the model produces the correct answer through faulty reasoning and cases where both the answer and its supporting rationale are correct.

Prompt

أنت متخصص في علم الفرائض (المواريث) في الإسلام.
 مهمتك: اقرأ المسألة التالية واختر حرف الجواب الصحيح
 فقط، ثم قدم تعليلًا مختصرًا، ويُفضل الاستشهاد بآية قرآنية
 أو حديث نبوي إن وجد.
 أجب بإيجاز
 الإجابة: حرف من :
 {valid_letters}
 التعليل: <تعليل شرعي مختصر باللغة العربية>
 السؤال: {question}
 الاختيارات: {options}

A.3 English Translations of Arabic Tables

Question	Answer
A woman died leaving a husband, two sons, and two daughters: how many shares does one daughter receive from the total shares of the estate?	One daughter obtains one share from the estate, while the daughters obtain half of what remains after giving the husband half of the estate, as mentioned in the Holy Qur'an: "And for them is a quarter of what they earned and for you what you earned" (al-Nisā': 32). Therefore, one daughter obtains one share, and the two sons share the rest.
A person died leaving: (full brother) 1, (daughter) 2, (full sister) 1. How many shares does each daughter receive?	If the heirs include a full brother, two daughters, and a full sister, the obligatory share (farḍ) of the full brother is one-half of the estate, while the remainder goes to the daughters equally. Since the brother takes half of the estate, the remaining half is to be divided between the two daughters, giving each of them one-quarter of the estate (i.e., two shares each).
A person died leaving his only son, his mother, and the mother of his father, and left \$7000. What is his mother's share of the amount?	According to the Qur'an, if the deceased leaves behind a sole son, no one else inherits, as God says in Sūrat al-Nisā' (4:11): "If he has a child, then he shall have one-half." Therefore, in this case, the mother does not inherit anything. It should be noted that this refers to the sharʿī entitlement (the legal share defined by Islamic law), not the literal financial distribution of assets mentioned in your question, which may vary depending on state laws regulating inheritance. According to the rulings of Islamic law, the mother does not inherit when there is a surviving male child.
A woman died leaving a husband, a mother, 4 full brothers, and 3 maternal brothers. What is the share of the maternal brothers?	If the deceased did not leave among the heirs except those mentioned, then the mother gets one-sixth as a prescribed share due to the existence of a group of brothers, as Allah said: "But if he has brothers, then for his mother shall receive one-sixth" (al-Nisā': 11). In this case, there is a group of brothers (4 full brothers and 3 maternal brothers), so the mother's share is one-sixth.
A person died leaving: (full brother) 2, (daughter) 4, (full sister) 1. How many shares does each daughter get?	In the case of one daughter and one full sister, the full sister takes half of the estate, and the daughter takes the other half. If there are more than one daughter, they share the half equally. In this case, each daughter gets one share of the half, meaning each daughter gets two shares of the full estate.
A woman died leaving a husband, a mother, 4 full brothers, and 3 maternal brothers. What is the share of the maternal brothers?	Allah said in Sūrat al-Nisā': "And for his parents, to each one of them is one-sixth of what he left if he has a child" (al-Nisā': 11). In this case, the mother and the father inherit one-sixth, and the maternal brothers also inherit one-sixth.
A person died leaving a wife, a daughter, a mother, two full brothers, and one full sister, and left 24,000. How much does the wife receive from this amount?	The wife takes one-eighth if the deceased has no child, as He, the Exalted, says: "But if your wives have no child, then for you is one-half of what they leave" (al-Nisā': 21). And since the wife had no child, the one-eighth amounts to six thousand.

Table 9: Translation of Table 3 into English

Question	Answer
Regarding the ruling on the inheritance of an intersex person whose inheritance varies based on whether they are considered male or female: What is the Maliki school's view on inheriting the intersex person in this case if they inherit differently in both scenarios?	The Malikis hold that in the case of an intersex person whose inheritance differs based on whether they are considered male or female, and their inheritance and the inheritance of the other heirs differ, both the intersex person and the other heirs should be treated with the lesser share (the smaller portion) to ensure that no one receives more than their certain right, based on the principle of not disbursing money based on doubt.
A person passed away, leaving behind a son and brothers. What is the ruling on the inheritance of a Muslim son from his Christian father if the father died before the son converted to Islam?	In the case of one daughter and one full sister, the full sister takes half of the estate, and the daughter takes the other half. If there is more than one daughter, they share the half equally. In this case, each daughter would have one share of the half, meaning each daughter would have two shares of the full estate.

Table 10: Translation of Table 4 into English

Question	Answer
A man passed away, leaving behind: (full brother) 3 in number, (full brother's son) 3 in number, (daughter) 4 in number, (wife) 1 in number, (full sister) 5 in number. How many shares does the wife get from the corrected original estate?	The wife gets one-eighth due to the existence of the inheriting descendants (daughters), as Allah says in the Qur'an: "But if you have a child, then they get one-eighth of what you leave." The original problem (before correction) is a multiple of the denominators of the wife's share (8) and the daughters' share (3), which is 24. The wife's share from this origin is one-eighth, which is 1/8 of 24, equal to 3. (Note: The problem needs correction because there is a remainder for the male heirs that is not divisible by their heads, but this explanation clarifies how to arrive at one of the given options, which is the wife's share before correction).
A man passed away, leaving behind: (full brother) 3 in number, (full brother's son) 3 in number, (daughter) 4 in number, (wife) 1 in number, (full sister) 5 in number. What is the total number of shares for the four daughters from the corrected original estate?	The total number of shares for the four daughters from the corrected original estate is 30 shares. Allah says in Surat An-Nisa: "...and those with blood relations are closer to one another in Allah's decree..." (Verse 7).
A woman passed away, leaving behind a wife and one full sister. What is the final share of each heir from the estate?	The wife inherits one-fourth due to the absence of inheriting descendants, as Allah says: "But if you have no child, then they get one-fourth of what you leave." The one full sister inherits half if she is alone and there is no male inheriting ascendant or any inheriting descendant, as Allah says: "If a man dies, leaving no child, but has a sister, then she gets half of what he leaves."
A woman passed away, leaving behind a husband, a father, a mother, and a daughter. To what number does this estate's shares 'aul' (increase)?	In this case, the number of shares 'aul' (increases) to 12. The number of shares 'aul' (increases) to 12 in the case of a husband, a father, a mother, and a daughter, where the husband is added to the problem, so the number of heads becomes 5 (3 + 1 + 1) and the estate is divided by 5. Allah says in Surat An-Nisa: "This is a duty ordained by Allah. Indeed, Allah is All-Knowing, All-Wise." (An-Nisa: 11).
A woman passed away, leaving behind a husband, sons, and daughters. Is it permissible for the mother to favor one of her children in the inheritance?	No, because the division of inheritance is a duty ordained by Allah the Almighty with definitive texts in the Holy Qur'an, and it is not permissible for anyone to change this division or to favor some heirs over others in it. Allah says at the end of the verses of inheritance: "This is a duty ordained by Allah. Indeed, Allah is All-Knowing, All-Wise. (An-Nisa: 11)."

Table 11: Translation of Table 5 into English

Question	Answer
A person passed away and is survived by: a mother, a wife, two full brothers, five full sisters, three paternal brothers, and a paternal sister. What is the mother's share?	According to my information, the mother's share is one-sixth due to the presence of the inheriting offspring, as Allah Almighty said: And for his parents, to each of them is one-sixth of what he left if he has a child [An-Nisa: 11]. Therefore, the mother's share in this case is one-sixth.
A person passed away and is survived by: 4 full brothers, 1 maternal brother, 1 mother, 4 daughters, 1 wife, and 2 full sisters. What is the type of inheritance for the full brother?	The justification: The full brother inherits by ' <i>asabah</i> ' if there is no closer male heir, as it was stated in the Prophet's tradition: "The full brother inherits the inheritance of the full brother," and thus the full brother inherits by ' <i>asabah</i> ' if there is no closer male heir.
A person passed away and is survived by: 2 full brother, 4 daughters and a full sister. What is the share of the four daughters?	The full brother and full sister and the children inherit. The full brother takes the father's share (half) and the full sister takes half, and thus two-thirds remain for the daughters (the remaining half) because the distribution is for the heirs, and the full brother and full sister take their share, and the daughters remain on the rest.

Table 12: Translation of Table 6 into English