Mathematical concepts in calculating Zakat Maal based on the Al-Qur'an perspective

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Abstract:
This research aims to reveal mathematical concepts in calculating Zakat Maal as explained in the Al-Qur'an. This research is qualitative descriptive research with a literature review type. The sources used as references in writing are the Al-Qur'an, books, and national and international journals relevant to the research study. The data collection methods used are observation and documentation, while the data analysis technique used in this research is content analysis. The results of the research show that mathematical concepts are found in Zakat Maal, namely in gold and silver Zakat, trade Zakat and professional Zakat (*the concept of relations and functions, the idea of sets*), agricultural Zakat and Rikaz ZAKAT (*the concept of fractional rational numbers*). The recommendation for further research is to expand the literature in the hope that later, we can obtain better results and discussions and develop an exploration of other mathematical concepts in calculating Zakat Maal.

Keywords: Al-Qur'an Perspective; Mathematical Concepts; Zakat Maal.

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Introduction

The Al-Qur'an is the holy book of Muslims, which is one of the miracles of the Prophet Muhammad SAW. which will last until the end of time. The Al-Qur'a was revealed gradually to the Prophet Muhammad SAW by Allah SWT through the angel Gabriel over 22 years, two months and 22 days (Mujahiddin & Annas, 2023). According to the Islamic perspective, the Al Quran is the main foundation of all existing laws; in other words, it can be said that the Al Quran is a guide for humans, especially Muslims, to live their lives in the world (Kasdi, 2019; Mattson, 2012; Yilmaz, 2021).

On the one hand, we can talk about the Al-Quran as a guide to human life. However, in reality, not everyone is aware of the unique features of the Al-Qur'an, so it is not uncommon for the concepts of life contained in the Al-Qur'an to not be revealed and understood optimally. If we examine it, the Al-Qur'an is the basis of Islamic law and includes several sciences. One example in the world of education, for example, is that

there is a lot of knowledge that has previously been explained in the Al-Qur'an. This is the opinion of Rifa'i and Marhamah (2020), who say the Al-Qur'an is the primary reference source for understanding life and education problems.

In line with the Al-Qur'an as the foundation or foundation of all laws, mathematics is the basis of all knowledge in education (Haerul et al., 2023). Based on this editorial, it can be said that mathematics is not only limited to theories that function at school but also covers all knowledge studied at school and everyday life in society. It is reinforced by experts' opinion that mathematics is closely related to everyday life (Haigh, 2016; Julie, 2013; Tap, 2021). Therefore, everyone should be able to realize the critical role of mathematics in life so that interest in studying and understanding mathematics grows and continues to develop from school to the community in general.

The importance of mathematics in everyday life does not mean it is easy to make mathematics a popular science (Lynn, 2018; Moreau et al., 2010; Vos, 2018). The lack of awareness of the importance of mathematics in life often becomes an obstacle to instilling an interest in learning mathematics. The large number of statements based only on things that are not certain to be true can sometimes form a person's lousy mindset about mathematics. One of them is the assumption that mathematics is difficult, where this assumption arises from a perspective that teaches that mathematics is full of complex formulas to solve. If we want to study it more deeply, most mathematics is born from things surrounding us daily, and mathematics is not always about complicated formulas and numbers.

Experts say that mathematics is a science related to shape, arrangement, quantity, and concepts associated with each other in large numbers. It is divided into three fields: algebra, analysis, and geometry (Alpers et al., 2014; Dreyfus & Eisenberg, 2012; Hiebert & Lefevre, 2013; Mainali, 2021). As time passes, many experts have put forward the meaning of mathematics based on their experience and knowledge. Some say that mathematics is just arithmetic, which includes addition, subtraction, multiplication, and division, but some also involve topics such as algebra, geometry, and trigonometry (Roziqin, 2019). Not many people know that mathematics was previously mentioned in the Al-Qur'an in the letter Yunus verse 5, Allah SWT says:

هُوَ ٱلَّذِي جَعَلَ ٱلشَّمْسَ ضِيَآءً وَٱلْقَمَرَ نُورًا وَقَدَّرَهُ مَنَازِلَ لِتَعْلَمُواْ عَدَدَ ٱلسِّنِينَ

وَٱلْحِسَابَّ مَا خَلَقَ ٱللَّهُ ذَٰلِكَ إِلَّا بِٱلْحَقِّ يُفَصِّلُ ٱلْأَيَٰتِ لِقَوْمٍ يَعْلَمُونَ ٥

Meaning: "He makes the sunshine and the moon shine and determines the manzilahs (places) for the month's journey so that you know the number of years and the calculation (time). God did not create it but with such rights. He explains the signs (of His greatness) to those who know" (Kementerian Agama, 2014).

Based on the meaning of the Al-Qur'an in Surah Yunus verse 5 above, we can understand the existence of mathematics in the Al-Qur'an by mentioning the words "numbers" and "calculations". As we know, the science that is synonymous with the words numbers and calculations is mathematics. Apart from that, several verses of the Al-Qur'an are proven to contain basic mathematical concepts, including surah al-Kahf verse 25 concerning addition formulas, surah al-Ankabut verse 14 concerning subtraction formulas, surah al-Baqarah verse 261 concerning multiplication formula,

and also Surah an-Nisa verse 12 concerning the division formula (Surianto, 2022). It shows a correlation between mathematics and the Al-Qur'an in the form of several verses that contain mathematical concepts.

If examined more deeply, mathematical concepts are contained in the Al-Qur'an and the calculation of Zakat Maal. The existence of Zakat Maal proves this as Zakat, which is divided into several types. Rahman et al. (2019) said that in Zakat Maal, previous scholars determined that there were five types of assets for which Zakat was required: livestock, gold and silver, trade, agriculture, and found assets (Rikaz). Every kind of Zakat Maal has different provisions and mishaps, proving that mathematics needs to play a role in calculating expenditure.

The results of research by Ramadhani and Salimah (2024) showed that the role of mathematics in the science of fiqh, the science of Islamic law, is significant because mathematics plays an essential role in the distribution of Zakat, one of the requirements for being a Muslim who is virtuous has faith and thinks together. Learning mathematics, mainly when calculating Zakat expenditure, is essential for Muslims to fulfill Zakat needs accurately and reduce confusion that may arise during the Zakat expenditure process. The research results of Rezzi et al. (2023) showed that Zakat Maal contains the concept of function. The results of research conducted by Muniri (2016) showed that mathematics has positively contributed to the context of jurisprudence (religion), which is the practice of Muslims, for example, determining water for two schools, calculating inheritance rights, and calculating Zakat.

Researchers among students obtained several observation results; one of the reasons they don't like mathematics is the opinion that mathematics is complicated; this is due to their still minimal understanding of the concept of integration of mathematics and religion (Al-Qur'an and Al-Hadith). Based on the description above, the author is interested in researching the integration of mathematics and religion. Hence, the researcher took the initiative to study mathematical concepts in calculating Zakat Maal based on the Al-Qur'an perspective. The choice of Zakat Maal in this research is expected to be one solution that can increase understanding of the concept of integration of mathematics and religion because calculating Zakat Maal tends to be practiced more often in everyday life. However, there are still many who are not aware of the role of mathematical concepts in it.

Thus, this research aims to reveal the mathematical concepts in the Al-Qur'an and the calculation of Zakat Maal. It is also an additional scientific treasure in studying mathematics and religion, so we can research mathematics textually and conceptually by uncovering their correlation. The difference between this research and previous research is that it does not only focus on one mathematical concept but also several mathematical concepts contained in the calculation of Zakat Maal. This research also presents an explanation or provisions for calculating Zakat Maal and its application.

Research Methods

This research is qualitative descriptive research with a literature review type. Literature review research analyses various conceptual information and qualitative and quantitative data from multiple published scientific articles, books, or books relevant to the study. A literature study guides studying a research problem (Kuhrmann et al., 2017; Okoli, 2015; Snyder, 2019; Torres-Carrión et al., 2018; Wohlin, 2014). In this literature review research, several references were used as the author's conceptual basis,

including the Al-Qur'an, Al-Hadith, national, and international books and journals relevant to the research study. This literature review research was conducted from October 2023 to February 2024.

The data collection methods used in this research are observation and documentation. Observations were used to observe problems among students, who were found to have little understanding of integrating mathematics and religion (Al-Qur'an and Al-Hadith). Meanwhile, documentation is used to capture research data about mathematical concepts and Zakat Maal from the perspective of the Koran, which is found in articles, books, books, and the Al-Qur'an. The data analysis technique used in this research is content analysis. In this case, the final stage is to draw conclusions based on the data group about the level of critical thinking skills when solving mathematical problems.

Results and Discussions
Mathematical Concepts in Zakat Maal

Zakat Maal or commonly referred to as property Zakat is Zakat imposed on all types of ownership that have reached the nishab and are up to one year (haul), and in essence or substance the acquisition does not conflict with religious provisions. The argument regarding the obligatory Zakat Maal is contained in the letter At-Taubah verse 103, Allah SWT says:

$$\text{خُذْ مِنْ أَمْوَٰلِهِمْ صَدَقَةً تُطَهِّرُهُمْ وَتُزَكِّيهِم بِهَا وَصَلِّ عَلَيْهِمْ ۖ إِنَّ صَلَوٰتَكَ سَكَنٌ لَّهُمْ ۗ}$$

$$\text{وَٱللَّهُ سَمِيعٌ عَلِيمٌ ١٠٣}$$

Meaning: "Take Zakat from some of their wealth, with that Zakat you cleanse and purify them and pray for them. Indeed, your prayer is (becomes) peace of mind for them. And Allah is All-Hearing, All-Knowing" (Kementerian Agama, 2014).

If studied more widely, it turns out that in some examples of implementing Zakat Maal, when calculating how much wealth must be spent, there is also a correlation between verses from the Al-Qur'an and mathematical concepts. It is proven by several examples of Zakat Maal calculations as follows.

Zakat on gold and silver

Muniri (2016), in one of his studies, "Contribution of Mathematics in the Context of Fiqh," states that Zakat Maal = 2.5% × the number of assets stored for one year. It can also be written as 1/40 × the amount of assets stored for one year. If we take the example of gold Zakat, one gold Nishab equals 85 grams. Then, we can write it as the concept of relations and functions (mathematics). As explained in the verse of the Qur'an in the letter Al-An'am verse 160, Allah SWT says:

$$\text{مَن جَاءَ بِٱلْحَسَنَةِ فَلَهُ عَشْرُ أَمْثَالِهَا ۖ وَمَن جَاءَ بِٱلسَّيِّئَةِ فَلَا يُجْزَىٰ إِلَّا مِثْلَهَا وَهُمْ لَا}$$

$$\text{يُظْلَمُونَ ١٦٠}$$

Meaning: "Whoever does good deeds will be rewarded ten times his deeds. And whoever does evil will be rewarded in proportion to his crime. They will not be harmed in the slightest (wronged)" (Kementerian Agama, 2014).

In the verse above, it is known that there is a relationship between two sets. Firstly, if you do good, you will be rewarded tenfold; secondly, if you do wrong, you will not be rewarded except in proportion to it. If this is written in mathematical language, a function will be formed, as shown below.

$$f(x) = \begin{cases} 10x, x > 0 \\ \square \\ \square \\ x, x > 0 \end{cases}$$

Information:
$f(x)$= The reward function given by Allah
$f(x)$= 10x, for x (1, 2,3…) good deeds in return
$f(x)$= x, for x (0, -1, -2, -3, …) recompense for bad deeds
　 x = Types of good/bad human actions

The following is a concrete example of a case regarding Zakat Maal in the form of gold. For example, Ani has 100 grams of gold; she has been saving it for a year. If she wants to pay Zakat for the gold this year, how much gold should Ani give Zakat? As we know, 100 grams has exceeded the Nishab of gold and has been stored for one year, so we can be sure that it meets the requirements for paying Zakat; we can know that the Zakat that must be paid is 2.5% × 100 grams = 1/40 × 100 = 2.5 grams of gold. If we calculate Zakat Maal in the form of gold in mathematical language, where the number 85 of one gold Nishab is included in the actual number, and the number 100 is replaced with the variable y, a function concept will be formed as below.

$$\text{Gold Zakat} = 2{,}5\,\%\,y = \frac{1}{40}y, y \in \mathbb{R} \wedge y \geq 85.$$

Information:
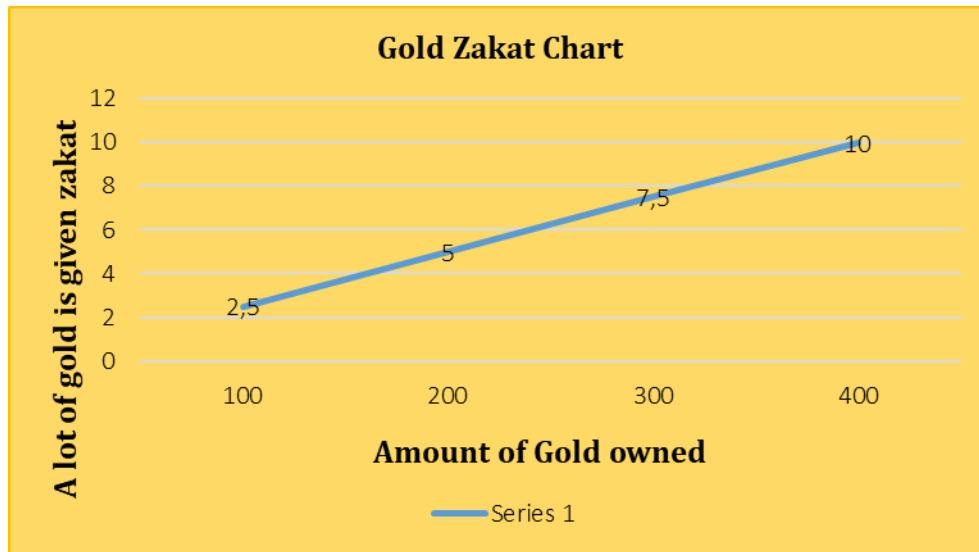Y = Lots of gold to own.
$\in$ = Members of part of.
$\mathbb{R}$ = Real Numbers.
$\wedge$ = conjunction (and).
$\geq$ = More than equals.

Furthermore, the gold Zakat simulation can be seen in the following Function Graph (Picture 1).

Picture 1. Gold Zakat Chart

Based on the graph in Picture 1 above, it is known that for 100 grams of gold, 2.5 grams of Zakat must be given. If it is 200 grams of gold, then 5 grams of Zakat must be provided, while if it is 300 grams of gold, then 7.5 grams must be given Zakat, and if it is 400 grams, then 10 grams of gold must be given Zakat by someone who has reached or exceeded one Nishab. The amount of Zakat that must be paid can also be presented as an arrow diagram involving domains and codomains in the concepts of relations and functions in mathematics learning. An example is in Picture 2 below.
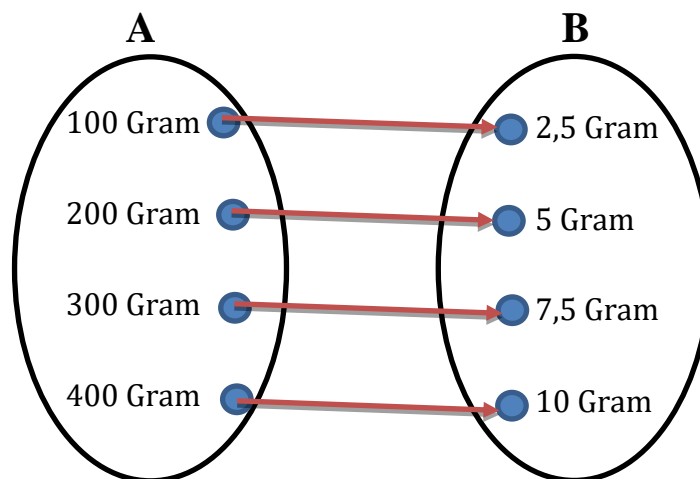
Picture 2. Arrow diagram of the gold Zakat relationship

Information:
A (Domain) = Amount of Gold owned.
B (Kodomain) = A lot of gold is given Zakat.

In line with the gold Zakat arrow diagram in Picture 2 above, it is known that in the practice of calculating gold Zakat also contains the concept of a set, where the domain and codomain in the arrow diagram act as the amount of gold owned and the amount of

gold that must be paid Zakat. in the form of gold, if converted into aggregate form it will be formed as follows.

S = Gold
A = Lots of gold owned
B = A lot of gold that must be paid Zakat
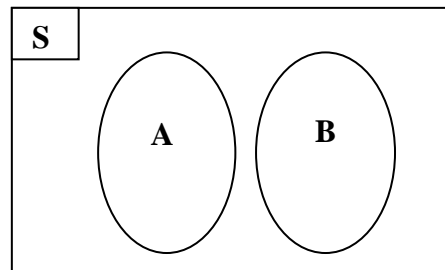
Picture 3. The universe has a lot of gold, and a lot of gold must be paid to Zakat

Agricultural Zakat

Agricultural Zakat is Zakat that farmers pay every time they harvest. It has reached 1 Nishab, namely when they reach 5 Wasaq or the equivalent of 653 kg. The levels of Zakat expenditure on agricultural products are adjusted to the water and fertilizer used. If the water and fertilizer are not purchased (natural), then the Zakat is $\frac{1}{10}$ of the harvest, but if the water and fertilizer are purchased, then it is enough to pay Zakat of $\frac{\frac{1}{2}}{10}$ of the harvest. It's different if you sometimes buy water and fertilizer, sometimes you don't, then the Zakat is $\frac{\frac{3}{4}}{10}$ of the harvest. The following is a concrete example of a case regarding Zakat Maal in the form of agricultural products.

For example, Mr. Ahmad has a harvest of one ton (1,000 kg) of corn; during the maintenance period, the water used is just rainwater, and the fertilizer comes from his manure. If all maintenance during farming does not cost money, how much corn will he produce? Does Mr. Ahmad have to pay Zakat?

Alternative Solution:

$$\frac{1}{10} \times \text{crop yield} = \text{Zakat that must be paid}$$

$$\frac{1}{10} \times 1.000 \text{ kg (corn)} = 100 \text{ kg (corn)}$$

Based on the solution above, it can be seen that the Zakat that Mr. Ahmad must pay is 100 kg of corn. If this solution is related to mathematical concepts, it includes the idea of rational numbers (fractions) in the form of $\frac{1}{10}$. It is also confirmed by the opinion of Roziqin (2019) in one of his studies, which stated that $\frac{1}{10}$ is the smallest rational number mentioned in the Al-Qur'an, namely in the letter Saba' verse 45 Allah SWT says:

وَكَذَّبَ ٱلَّذِينَ مِن قَبْلِهِمْ وَمَا بَلَغُوا۟ مِعْشَارَ مَآ ءَاتَيْنَٰهُمْ فَكَذَّبُوا۟ رُسُلِيۖ فَكَيْفَ كَانَ نَكِيرِ ٤٥

Meaning: "And those before them had lied (the apostles) while those (infidels of Mecca) had not yet received a tenth of what We had given to those before them, but they lied to My apostles. So (see) how terrible the consequences of My wrath are" (Kementerian Agama, 2014).

Zakat Rikaz (found goods/wealth saved by ignorant people)

According to the ulama, Zakat Rikaz is Zakat, which must be paid if you find goods or treasures saved by ignorant people, or nowadays what we usually call treasures. The prescribed rate is $\frac{1}{5}$ of the Rikaz assets without any Nishab provisions. If you find Rikaz treasure in the form of 20 grams of gold in the ground, then the Zakat that must be paid is $\frac{1}{5}\times20$ grams = 4 grams of gold. Based on the Zakat Rikas calculation, it can be seen that the calculation of Zakat Rikaz also involves the mathematical concept of numbers in the form of the fraction $\frac{1}{5}$. It is also reinforced by the opinion of Roziqin (2019) in one of his studies, which states that $\frac{1}{5}$ is the concept of a fractional rational number mentioned in the Al-Qur'an, Surah Al-Anfal verse 41. Allah SWT says:

وَٱعْلَمُوٓا۟ أَنَّمَا غَنِمْتُم مِّن شَيْءٍ فَأَنَّ لِلَّهِ خُمُسَهُ وَلِلرَّسُولِ وَلِذِي ٱلْقُرْبَىٰ وَٱلْيَتَٰمَىٰ وَٱلْمَسَٰكِينِ وَٱبْنِ ٱلسَّبِيلِ ...

Meaning: "And know, indeed, everything you get is as war booty, then one-fifth is for Allah, the Messenger, the relatives of the Messenger, orphans, the poor, and Ibn Sabil..." (Kementerian Agama, 2014).

Trade Zakat and Professional Zakat

Trade Zakat and professional Zakat are similar in terms of their nishab provisions, where the nishab of both is equivalent to the current price of 85 grams of gold. It's just that when paying Zakat, trade must determine the annual time to pay Zakat and also deduct debts. Meanwhile, professional Zakat is issued after receiving a salary, provided that debts and daily necessities have been deducted. Trade and professional Zakat also has similarities with gold and silver Zakat in calculating the amount of Zakat that must be paid, namely 2.5%. The following is how to calculate the trade of Zakat and professional Zakat.

Trade Zakat   = (Merchandise value + profit- Accounts payable) × 2.5%
                  = 2.5 % × annual income

Profession Zakat = (Total salary - Total expenses) × 2.5%
= 2.5 % × Monthly Income

Based on the method for calculating Zakat on trade and profession above, the procedure appears to align with calculating Zakat on gold and silver (Haris, 2020; Irfan et al., 2020; Owoyemi, 2020). It indicates that the calculation of trade and professional Zakat also contains the concepts of set, relationship, and function, as explained at the beginning of the discussion above, namely in the explanation of gold Zakat.

Conclusions and Suggestions

Based on the results and discussion described above, it can be concluded that the calculation of Zakat Maal based on the perspective of the Qur'an contains several mathematical concepts, including the idea of sets, relationships, and functions contained in the calculation of gold and silver Zakat, trade Zakat and Profession Zakat. The concept of fractional rational numbers is also included in the agricultural Zakat and Rikaz Zakat calculation. There are suggestions for researchers in further research to increase the literature in the hope that later they can obtain better results and discussions and can develop an exploration of other mathematical concepts in calculating Zakat Maal.

Acknowledgements

References

Ab Rahman, M. F., Ab Rahman, A., & Ab Rahim, S. F. (2019). Agricultural Zakat from the Islamic perspective: Agricultural Zakat from the Islamic perspective. *Journal of Fatwa Management and Research*, *17*(2), 92–118. https://doi.org/10.33102/jfatwa.vol0no0.276

Alpers, B. A., Demlova, M., Fant, C.-H., Gustafsson, T., Lawson, D., Mustoe, L., Olsen-Lehtonen, B., Robinson, C., & Velichova, D. (2014). A framework for mathematics curricula in engineering education: a report of the mathematics working group. *European Society for Engineering Education (SEFI)*. https://repository.lboro.ac.uk/articles/report/A_framework_for_mathematics_curricula_in_engineering_education_a_report_of_the_mathematics_working_group_/9367541

Dreyfus, T., & Eisenberg, T. (2012). On different facets of mathematical thinking. In *The nature of mathematical thinking* (pp. 253–284). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780203053270-14/different-facets-mathematical-thinking-tommy-dreyfus-theodore-eisenberg

Haerul, H., Iqra, I., Al, B. M. A. M. H., & ELSakhawy, R. M. (2023). The role of the teacher in instilling tauhid-based education in students in the perspective of the Qur'an. *Solo Universal Journal of Islamic Education and Multiculturalism*, *1*(1), 50–57.

https://doi.org/10.61455/sujiem.v1i01.35

Haigh, J. (2016). *Mathematics in everyday life.* Springer. https://link.springer.com/book/10.1007/978-3-030-33087-3

Haris, G. (2020). The application of dynamic Zakat percentage by Yusuf al-qaradawy on the professional Zakat in Indonesian BAZNAS. *Asy-Syir'ah: Jurnal Ilmu Syari'ah Dan Hukum*, *54*(2), 299–317. https://doi.org/10.14421/ajish.v54i2.922

Hiebert, J., & Lefevre, P. (2013). Conceptual and procedural knowledge in mathematics: An introductory analysis. In *Conceptual and procedural knowledge* (pp. 1–27). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780203063538-1/conceptual-procedural-knowledge-mathematics-introductory-analysis-james-hiebert-patricia-lefevre

Irfan, I., Muhyarsyah, M., Marpaung, A. P., & Liswanty, I. (2020). Reconstruction from the aspects of Islamic law in corporate Zakat accounting. *Jurnal Akuntansi Dan Auditing Indonesia*, 139–147. https://doi.org/10.20885/jaai.vol24.iss2.art7

Julie, C. (2013). The stability of learners' choices for real-life situations to be used in mathematics. *International Journal of Mathematical Education in Science and Technology*, *44*(2), 196–203. https://doi.org/10.1080/0020739X.2012.703337

Kasdi, A. (2019). Actualizations of Maqāṣid Al-Shariah in modern life; Maqāṣid Al-shariah theory as a method of the development of Islamic laws and Shariah economics. *Justicia Islamica*, *16*(2), 247–268. https://doi.org/10.21154/justicia.v16i2.1666

Kementerian Agama, R. I. (2014). *Al-Qur'an dan Terjemahan [Al-Qur'an and Translation].* Diponegoro.

Kuhrmann, M., Fernández, D. M., & Daneva, M. (2017). On the pragmatic design of literature studies in software engineering: An experience-based guideline. *Empirical Software Engineering*, *22*, 2852–2891. https://doi.org/10.1007/s10664-016-9492-y

Lynn, M. R. (2018). Popular science and public opinion in eighteenth-century France. In *Popular science and public opinion in eighteenth-century France.* Manchester University Press. https://doi.org/10.7765/9781526130457

Mainali, B. (2021). Representation in teaching and learning mathematics. *International Journal of Education in Mathematics, Science and Technology*, *9*(1), 1–21. https://doi.org/10.46328/ijemst.1111

Mattson, I. (2012). *The story of the Qur'an: its history and place in Muslim life*. John Wiley & Sons. https://ixtheo.de/Record/526109599

Moreau, M., Mendick, H., & Epstein, D. (2010). Constructions of mathematicians in popular culture and learners' narratives: a study of mathematical and non-mathematical subjectivities. *Cambridge Journal of Education*, *40*(1), 25–38. https://doi.org/10.1080/03057640903567013

Mujahiddin, A., & Annas, M. (2023). Konsep Tartil dan pengaruh penerapannya dalam

membaca Al-Qur'an [The concept of Tartil and the influence of its application in reading the Al-Qur'an]. *Ulumul Qur'an: Jurnal Kajian Ilmu Al-Qur'an Dan Tafsir*, *3*(2), 201–216. https://ojs.stiudq.ac.id/JUQDQ/article/view/164

Muniri, M. (2016). Kontribusi matematika dalam konteks Fikih [Contributions of mathematics in the context of Fiqh]. *Ta'allum: Jurnal Pendidikan Islam, 4 (2), 193–214.* https://doi.org/10.21274/taalum.2016.4.2.193-214

Okoli, C. (2015). A guide to conducting a standalone systematic literature review. *Communications of the Association for Information Systems*, *37*. https://hal.science/hal-01574600/

Owoyemi, M. Y. (2020). Zakat management: The crisis of confidence in Zakat agencies and the legality of giving Zakat directly to the poor. *Journal of Islamic Accounting and Business Research*, *11*(2), 498–510. https://doi.org/10.1108/JIABR-07-2017-0097

Ramadhani, S. L., & Salimah, Y. M. (2024). Peranan matematika terhadap ilmu fiqih: pentingnya belajar menghitung pengeluaran Zakat bagi umat muslim [The role of mathematics in the science of jurisprudence: the importance of learning to calculate Zakat expenditure for Muslims]. *Religion: Jurnal Agama, Sosial, Dan Budaya*, *3*(2), 415–420. https://doi.org/10.55606/religion.v3i2.952

Rezzi, F., Hamdani, H., & Nursangaji, A. (2023). Eksplorasi konsep fungsi dalam ibadah Zakat [Exploration of the concept of function in Zakat worship]. *Jurnal Education and Development*, *11*(2), 87–94. https://doi.org/10.37081/ed.v11i2.4592

Rifa'i, A., & Marhamah, M. (2020). The method of messenger of Allah in Al-Qur'an learning. *Journal of Educational and Social Research*, *10*(3), 131–140. https://doi.org/10.36941/jesr-2020-0053

Roziqin, M. K. (2019). Hubungan Al-Qur'an dengan matematika [The relationship between the Al-Qur'an and mathematics]. *EDUSCOPE: Jurnal Pendidikan, Pembelajaran, Dan Teknologi*, *5*(1), 55–65. https://doi.org/10.32764/eduscope.v5i1.375

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*(11), 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Surianto, S. (2022). Matematika dalam Al-Qur'an [Mathematics in the Al-Qur'an]. *Al-'Adad: Jurnal Tadris Matematika*, *1*(1), 60–71. https://doi.org/10.24260/add.v1i1.811

Tap, W. D. (2021). Teaching and learning mathematics for understanding, enjoyment and everyday life experiences. In *Insights Into Global Engineering Education After the Birth of Industry 5.0*. IntechOpen. https://doi.org/10.5772/intechopen.99101

Torres-Carrión, P. V., González-González, C. S., Aciar, S., & Rodríguez-Morales, G. (2018). Methodology for systematic literature review applied to engineering and education. *2018 IEEE Global Engineering Education Conference (EDUCON)*, 1364–1373. https://doi.org/10.1109/EDUCON.2018.8363388

Vos, P. (2018). "How real people really need mathematics in the real world" Authenticity in mathematics education. *Education Sciences*, *8*(4), 195. https://doi.org/10.3390/educsci8040195

Wohlin, C. (2014). Guidelines for snowballing in systematic literature studies and a replication in software engineering. *Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering*, 1–10. https://doi.org/10.1145/2601248.2601268

Yilmaz, I. (2021). Muslims, sacred texts, and laws in the modern world. *Handbook of Contemporary Islam and Muslim Lives*, *12*(8), 19–37. https://doi.org/10.1007/978-3-030-32626-5_5