

IMPLEMENTATION OF THE CONCEPT OF MATHEMATICS IN THE QUR'ANON FAST COUNTING METHOD

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ABSTRACT

Al-Qur'an is a holy book that was revealed to the Prophet Muhammad SAW. This book is special because it can be viewed from various scientific aspects, so that many researchers are inspired by the Qur'an to develop their field of knowledge. Likewise, which contains mathematical concepts, many verses of the Qur'an are directly or indirectly related to the field of mathematics. Studying the Qur'an is like studying the universe and its contents, it is endless and always brings out new things. This is the miracle of the Qur'an, the deeper you study it, the veil of knowledge will be wide open, so a vast horizon is opened to be known. Likewise, if it is associated between mathematical concepts in the Qur'an and the quick count method. The study of the implementation of mathematical concepts in the Qur'an is very important in mathematics education so that the nature of learning mathematics can be understood easily and precisely. The implementation of the mathematical concepts of the Qur'an in the fast counting method needs a stronger emphasis on understanding the nature and meaning that mathematics is part of science that can bring students closer to the creator so that mathematics can shape the character and personality of students who are thorough, accurate, calculating, careful, using the mind that was endowed by God so that they become the Ulul Albab group (people who can develop the potential of dhikr and thought to produce pious deeds).

Keywords: *Al-Qur'an, mathematical concepts, fast counting method*

INTRODUCTION

Al-Qur'an gives a motivation for learn mathematics as which there is in the verse: *“He is the One who made the sun to shine and the moon to shine and He ordained manzilah-manzilah (places) for travel moon that, so you find out number years and calculations (time). God doesn't create thus that rather by true. He explains the signs (his greatness) to people- people who know”.* (Yunus: 5)

Mathematics is one of the

sciences that studies how to count, measure something by numbers, symbols, or quantities. The subject matter of the study includes algebra, statistics, logic, geometry, measurement etc. Mathematics always related to the daily life either directly or indirectly (Mahmudah&Fikroh, 2021). The role of mathematics is very needed because of itself considered *mother of science*. It means, every branch of science is related to mathematics for the sake of convenience in study that

science.

Mathematics object called with *abstraction* and realize mathematics in world real called *application*. Mathematics is abstraction from world real, so mathematical object is abstract and deep language symbol (Indriyani et al, 2020). For understand object which real required approach rationalist, empirical, and logical (*bayani* and *burhani*).

Learning mathematics can form logical thinking, not just good at counting (Kismiati et al, 2021). Mathematics basically teaches logical thinking, based on reason and reason. However, it must be remembered that mathematics is abstract and not real because it consists of symbols (Salim&Mahmudah, 2021). Thus, mathematics as a science can be used as an approach in explaining some explanations in Islamic teachings. The use of a mathematical approach here does not mean that the teachings of Islam are weak but only to increase the belief of Muslims that all knowledge is of good value and can lead to true goodness and increase faith and closeness to Allah. Even in the Qur'an itself, there are many verses that use numbers to convey truth information to humans. Therefore, this paper will briefly review the relationship between mathematics learning that is integrated with Islamic teachings.

DISCUSSION

Al-Qur'an

The Qur'an has revealed various aspects related to the learning process teach this. Meanwhile, the universe and everything in it is so organized neat, harmonious, contains the verses of God (verse kauniyah), contains various things that needed for support continuity life man like air, water, soil, plants, livestock, mineral materials, mining materials and so on which considered as an educational tool that can be used to deliver man to purpose of real life. (Najmudin, 2019).

One aspect of learning that gets attention from the Qur'an is: aspects of teaching, teaching materials, teaching and learning process, learning and evaluation materials. Pay attention to the content of surah *al-Fatihah* [1]: 1-7 which means in full are:

In the name of God, Most Gracious, Most Merciful; Yang Mastering the Day of Judgment; You alone we worship, and only to you we worship and only to you we pray help, show us the straight path (that is) the way of those who have been you bestow favors on them, not (the way) of those with whom you are worth and not (also walks) those who are astray. (al-Fatihah : 1-7)

1. Mathematics Learning

In the big Indonesian dictionary, the definition of mathematics is the science of numbers, the relationship between numbers, and operational procedures used in solving problems regarding numbers". Mathematics according to Russefendi is the language of symbols; deductive science that does not accept inductive proofs; the science of patterns. regularity, and an organized structure, starting from elements that are not defined to those that are defined, to postulates and finally to propositions, while the nature of mathematics, according to Soedjadi, is an abstract objective object, based on agreement, and a deductive mindset (Fitria, 2013).

Thus, learning mathematics is a way of thinking and reasoning that is used to solve various types of problems in everyday life, science, government, and industry. Symbols and language in mathematics are universal so that they are understood by the nations of the world (Nisrina et al, 2021).

2. Al-Quran discusses addition

- a. *And they stayed in their cave three hundred years and nine years added (again). (Surat al-Kahf: 25)*
- b. The verse above discusses the length of time Al-Kahf's youth lived in the cave, which is 300 plus 9 years, aka 309 years.

3. The Qur'an talks about subtraction

- a. *And verily We sent Noah to his people, so he lived among them a thousand years less than fifty years. So, they were struck by a great flood, and they were the wrongdoers. (Surat al-'Ankabuut: 14)*
- b. The verse above explains how long Noah 'alaihi salam lived with his people, which is 1000 years minus 50 years, aka 950 years.

4. Al-Quran talks about the fold

- a. *The adulterous woman and the adulterous man, let each of them be beaten a hundred times, and let no mercy prevent you from the religion of Allah, if you believe in Allah and the Last Day, and let (execution) of their punishment be witnessed by a group of believers. (Surat an-Nur: 2)*
- b. *And those who accuse virtuous women and do not bring forth four witnesses, they shall be beaten eighty times, and do not accept their testimony forever. And they are the wicked. (Surat an-Nur: 4)*

5. The Qur'an discusses the number of fractions

And for you (husbands) is half of what your wives leave if they have no children. If your wives have children, then you get a quarter of what they leave behind after fulfilling the will they made or (and) all the debt is paid. The wives get a quarter of the property you leave if you have no children. If you have children, then the wives get

one- eighth of what you leave after fulfilling the will you made or (and) after paying your debts. If a person dies, either a man or a woman who leaves no father and no child but has a brother (mother only) or a sister (mother only), then for each of the two types of brothers is one-sixth treasure. But if the siblings are more than one, then they are allies in the third, after fulfilling the will made by him or after paying the debt without harming (the heirs). It is a law from Allah, and Allah is Knowing, Forbearing. (QS An-Nisaa ': 12)

The verse above discusses the division of inheritance, in that verse there is a mention of "one-half", "third", "quarter", "one-sixth". Which in Mathematics is often used.

6. Odd and Even Numbers

Al-Qur'an is the main source of Islamic teachings that are qath`y, which is purely a revelation from Allah SWT. In this case, it turns out, the Qur'an is a source of knowledge that has been proven by many experts today. Sheikh Thonthowy Jauhari in his commentary Al-Jawahir has given an interpretation that Allah SWT has sworn by science. He swears by even and odd numbers which are both numbers from the Word of Allah Qs. Al-Fajr: 3:

Meaning: *"And the even and the odd"* (Al-Fajr: 3). In Jalalain's tafsir, the word "syaf` i "is only interpreted as" in pairs "and the word" watr "is interpreted

as" alone "without more detailed explanation. In the tafsir of Ibn Katsir and the tafsir of Al-Qurthubi there are many interpretations of the word "syaf` i" and the word" watr "among them

1) as the day of arafah (date 9) and the day of nahar (date 10) of the month of Dzul Hijjah.

2) as shubuh prayer (2 rak'ahs) and maghrib prayer (3 rak'ahs), oreven the whole fardhu prayer. Some have even rak'ahs and odd rak'ahs. as God's oath to creatures and Himself. Shaf'i is a creature and the witr is Allah SWT. Allah SWT is witr, odd, that is wahid (one) while creatures are syaf`i or in pairs. There is heaven and earth, land and sea, west and east, good and bad, bitter and sweet, high and short, and so on. All of Allah's creations are in pairs as in QS Adz-Dzariyat verse 49 which means: And We created everything in pairs so that you remember the greatness of Allah.

7. The value of phi with tawaf andkaaba.

Thawaf is one of the pillars of Hajj, which is around the Kaaba. The words of Allah SWT which means: "Then, let them remove the dirt, which is on their bodies and let them fulfill their vows and let them perform tawaf around the oldhouse (Baitullah)".

As we know, tawaf is a circular walk that forms a circle and is performed seven times. The words of the Prophet SAW:

From Jabir: "That the great Prophet SAW, when he reached Mecca had approached the blackstone, then he wiped the black stone with his hand,

then he walked to his right; walk fast three times around and walk normally four times around". History of Muslims and Nasai.

From Abu Huraira, that he heard the Prophet SAW say: "Whoever goes around the Kaaba seven times and does not say anything other than: Glory be to Allah and all praise is due to Allah, there is no god worthy of worship except Allah, Allah is Great and There is no power and strength except with the help of Allah. The person who reads this sentence, will number round a number to the nearest fraction

1. Learn from Daily Activities

All learning methods are good. Mom and Dad can learn about each method in more detail, from various reliable sources. Also consider your little one's interest, ma'am. To be sure, he must *enjoy* while studying. So that he really understands, and learns with all his heart, not just to pursue academic grades at school. (Zaman, 2012). Your little one can also learn to count from daily activities, Mom. For example, helping Mom count change for shopping, counting the contents of her piggy bank, counting carrots that Mom uses to make soup, or counting T-shirts when she puts clothes in the closet.

2. Counting Things Around

Mothers can teach children to count objects that are around the house or around the child and mother's environment. (Murtie, 2013)

3. Learn to Count while Wearing Shoes or Wearing Clothes

One way to count fast for children is to apply the recommendation to count when the child is wearing clothes or wearing shoes. Thus, children can also learn to train their focus and speed. (Suryana, 2016)

4. Use Concrete Examples or Related to Everyday Life

To teach the concept of counting to children, mothers can use concrete examples. For example, asking children to count the number of fruits they want to buy and so on. (Nasional, 2007)

CONCLUSION

Knowledge is one of the intermediaries to strengthen faith. Faith will only increase and strengthen, if accompanied by knowledge. For Muslims, the Qur'an is one of the holy books that has all the secrets of life. Mathematics can help provide a scientific, symbolic language explanation for Islam. However, the theological level of truth from the results of the study, only Allah SWT knows. Because the truth of science itself is relative, while the truth of Islam is absolute.

The Qur'an contains everything according to the word of Allah SWT: there is nothing that I have left in the Qur'an. With the mathematical aspect in the Qur'an, this will be able to break

the "belief" of some people who believe that mathematics is a product of the West and also break the notion that science has nothing to do with Islam. Because basically mathematics is very closely related to the spiritual activities of Muslims. And with mathematics and Islam lessons we can increase our faith in Allah SWT.

From the discussion above, we can conclude that the learning of mathematics contained in the Qur'an in addition to being learning mathematics as a way of thinking and reasoning that is used to solve various types of problems in everyday life also implies that learning mathematics in the Qur'an also trains us to be able to count quickly with this method.

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