

## ***Mathematics and Raka'at of Dhuha Prayer***

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### ***Abstract***

The uniqueness of the number raka'at of dhuha prayers taught by the Prophet gave new interest to the author to see the relationship of the number of raka'ah of the dhuha prayer with Mathematics. The non-interactive qualitative approach of the Library Research type is a research method to explore mathematical interconnections and the number of rak'ahs of the dhuha prayer. There are four steps in this research, namely data collection, data reduction, data presentation, and data analysis. Descriptive analysis is used to present the results of the interconnection between mathematics and the number of rak'ahs of the dhuha prayer. In this study, expert validation was carried out to ensure the validity of the data and the results of the analysis. From the research, it was found that the number of rak'ahs for the dhuha prayer, when written in one line, will form the same pattern as the integer pattern. The general form of the pattern of the number of rak'ahs for the dhuha prayer that is formed  $U_n = 2n$ .

**Keywords:** *Mathematical; Dhuha Prayer; Raka'at of Dhuha Prayer.*

### **Abstrak**

Keunikan pada jumlah shalat dhuha yang diajarkan oleh Rasulullah, memberikan ketertarikan baru pada penulis untuk melihat hubungan dari jumlah-jumlah rakaat shalat dhuha tersebut dengan Matematika. Pendekatan kualitatif non interaktif tipe *Library Research* menjadi metode penelitian untuk menggali interkoneksi matematika dan jumlah raka'at shalat dhuha. Terdapat empat langkah pada penelitian ini, yaitu pengumpulan data, reduksi data, penyajian data, dan analisis data. Analisis Deskriptif digunakan untuk menyajikan hasil interkoneksi antara matematika dan jumlah rakaat shalat dhuha. Pada penelitian ini, validasi secara ahli dilakukan untuk memastikan keabsahan data dan hasil analisisnya. Dari penelitian, didapati bahwa jumlah rakaat shalat dhuha, bila dituliskan dalam satu barisan, maka akan membentuk pola yang sama dengan pola bilangan bulat. Bentuk umum dari pola jumlah rakaat shalat dhuha yang terbentuk adalah  $U_n = 2n$ .

**Kata Kunci:** Matematika; Shalat Dhuha; Jumlah Raka'at Shalat Dhuha.

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## INTRODUCTION

The Qur'an is the source and basis of every science created on this earth. The Qur'an, which contains the word of God, is intended for people as a guide in living life and as a warning for people not to commit disobedience. In Qur'an Surah Yasin, verses 1-6. Which means:

*"For the sake of the Qur'an which contains wisdom. You are one of the messengers (Muhammad). On a straight path. The Qur'an is a revelation from the Exalted, the Merciful. In order for you to remind the people who have never received a warning, therefore they become negligent".*  
(Al-Qur'an, 2019)

And in accordance to Surat Al Isra verse 9 which means:

*"Verily, this Qur'an guides to the most straight path and brings glad tidings to the believers, who do good, that they will be given a great reward"* (Al-Qur'an, 2019)

QS Al-Alaq verses 1-5 mention that Allah gives guidance through the medium of *His word* (Qur'an) and commands people to read the Qur'an in order to obtain guidance. The meaning of QS Al-Alaq verses 1-5 is as follows:

*" Read by mentioning the name of your Lord who created, He has created man from a lump of blood. Read and your Lord is the Most Gracious, Who teaches people by the medium of the kalam. He taught man what he did not know. "*. (Qur'an, 2019)

Based on the three verses above, QS Yasin verses 1-6, Qs Al Isra verse 9, and QS Al-Alaq verses 1-5, has the meaning that the Qur'an is the source of all sources that exist on earth, contains all information needed by humans is no exception for science. Al-Qur'an and science are two things that cannot be separated and interrelated with one another (Abdussakir, 2009) . More than 750 verses in the Qur'an describe natural laws that are in line with science and mathematics which are the correspondence of these natural laws (Latifah & Cecep, 2022) . This illustrates that the Qur'an and Mathematics are interrelated and have harmonious integration, so it is important for people to study the signs of the relationship between mathematics and the Qur'an.

The Qur'an, which is a miracle from Allah for his humanity, contains the words of Allah in the best possible language, it is impossible for people to understand without the intercession and help of the Prophet of Allah, Rasulullah SAW. In accordance with QS Yasin verses 1-6, which states that the Prophet Muhammad SAW is the messenger of God, who was asked to teach the word of God through the Qur'an. What was taught, explained, and exemplified by the Prophet Muhammad SAW is included in the Hadith of the Prophet. This hadith contains instructions and explanations about the command of Allah SWT, how to carry out the command of Allah SWT with a detailed explanation and easy to understand by people. The existence of this Hadith is vital, as an extension of the explanation of the Qur'an, and can not be separated from the Qur'an. The importance of this Hadith, indicates that, in order to get ease in carrying out the commands of Allah through the Qur'an, look at the guidance of the Prophet of Allah through the Hadith.

The Qur'an contains instructions and commands from Allah SWT. One of the many commands that appear in the Qur'an is prayer. This is contained in one of the verses of the Qur'an, namely QS Thaha verse 140 which means:

*"Indeed, I am Allah, there is no god (who is right) other than Me, so worship Me and establish Prayer to remember Me" (Qur'an, 2019).*

There are two types of prayers taught by the Prophet on the word of God, namely the obligatory prayers and the Sunnah prayers. Sunnah prayers are the perfecting prayers of the obligatory prayers taught by the Prophet through his Hadiths. Allah in QS Al Isra verse 79 also ordered to establish sunnah prayers in addition to obligatory prayers. One of the sunnah prayers that was always taught by the Prophet SAW during his life was the Dhuha sunnah prayer. This is narrated in a Hadith which means:

*"From Abu Hurairah: Rasulullah SAW told me three things (which I will never leave until I die), namely fasting three days every month, two cycles of Duha and praying witr before going to bed" (HR Al-Bukhori) (Al-Bukhari, 1978)*

The above hadith explains how important the sunnah dhuha prayer is to be implemented. The privilege that the Prophet also revealed about the Duha prayer is that the Duha prayer is a substitute for alms for members of the body (HR. Ahmad Muslim and Abu Daud). Duha is also one of the special sunnah prayers in the sight of Allah as illustrated by the revelation of the verse of the Qur'an, namely QS Ad-Duha.

Mathematics is very intersecting and always appears in every aspect of human activities in everyday life. Human life is greatly influenced by mathematics. Human life cannot be separated from mathematics. The religious knowledge contained in the Qur'an is integrated-connected with mathematical concepts. Many mathematical concepts are connected with religious teachings in the Qur'an, such as the concept of number theory, sets, algorithms in determining the Qibla direction, geometry, and other mathematical concepts. If we look at the verses about dhuha prayer, we know that there is an element of basic mathematics, namely numbers that used to explain the number of rak'ahs of dhuha prayer.

The Messenger of Allah taught to perform the Duha prayer at least 2 cycles, but in another hadith the Prophet has also performed the Duha prayer more than 2 cycles, 4 cycles, 6 cycles, and so on. The existence of differences in the rak'ahs of the sunnah dhuha prayer carried out by the Prophet made a new interest for researchers to see whether there is an interconnection between the rak'ahs of the sunnah dhuha prayer and mathematics. Considering that mathematics is one of the correspondences of natural law which must coincide with Allah's commands in the Qur'an and the Hadith of the Prophet.

## **RESEARCH METHODS**

This study uses a non-interactive qualitative approach with the *library research* method. *Library Research* is a series of activities related to methods of collecting library data, reading, and recording and processing research materials (Hamzah, 2019) . In this study, to reveal the connection between the Raka'at of dhuha prayer and mathematics, it was carried out through three main stages,

namely firstly looking for sources related to the sunnah dhuha prayer and mathematics, either reading sources or expert opinions. Second, record all findings from previously discovered sources. Third, combining reading data and data from experts which is then categorised. Fourth, analyze and interpret the findings that have been obtained to reveal the relationship between the raka'at of dhuha prayer and mathematics. The technique used in analyzing is a descriptive content analysis technique where the data obtained will be presented descriptively. Expert validity was also used in this study to ensure that the data obtained by the researcher were correct (no misinterpretation).

This research is presented in Table 1

**Tabel 1. References *Library Research***

NO	Title	Author	Description
1	Syarah Hadits Pilihan Bukhari Muslim	Abdullah bin Abdurrahman Alu Bassam	Hadith
2	Sahih Bukhari	Muhammad Al-Bukhari	Hadith
3	HR.Muslim	HR.Muslim	Hadith
4	Buku Kitab Hadits Sunan at- Tirmidzi set-Hadits Hadits Imam At-Tirmidzi	Al-Imam al-Hafizh Muhammad bin Isa bin Saurah At-Tirmidzi,	Hadith
5	HR.Al Baihaki	Al Baihaki	Hadith

## RESULTS AND DISCUSSION

Rasullah during his life taught and exemplified to his people to always perform sunnah dhuha prayers in the morning. This is explained by Abu Hurairah in an HR Bukhari which means that the Prophet never died three things of sunnah until the end of his life, namely fasting three days every month, two raka'ah of sunnah prayer dhuha and witr prayer before bed. Another hadith explains that the Prophet taught the dhuha prayer as a prayer that is recommended to invite people to always give alms in the form of gratitude to God through alms for the joints in the body. Dhuha prayer as a joint, narrated by Abu Dzar radhiallahu anhu in HR Muslim which means:

*“At every joint you must issue alms every morning; Every tasbih (reciting subhanallah) is alms, every tahmid (reciting Alhamdulillah) is*

*alms, every tahlil (reciting Lailaha illallah) is alms, every takbir (reciting Allahu Akbar) is alms, amar bil ma'ruf is alms, nahi 'anil munkar is alms. All that can be fulfilled with (prayer) two rak'ahs performed at the time of Dhuha. "* (Bassam, 2019).

In its implementation, Rasulullah performed dhuha prayers with various numbers of rak'ahs, without any maximum limit. Some hadiths explain about the number of rak'ahs of sunnah dhuha prayers performed by the Prophet, are as follows;

Narrated by Bukhari, from Abu Hurairah, who reads:

عن ابي هريرة قال اوصاني خليلي صلى الله عليه وسلم بثلاث: صيام ثلاثة ايام من كل شهر، ورغعتي الضحى، وأن أوتر قبل أن أنام. (رواه مسلم)

*"Abu Hurairah RA said, "My beloved Messenger of Allah told me three things: fasting three days every month, two cycles of dhuha, and that I pray with before going to bed." .* (Al-Bukhari, 1978)

Another Hadith explained that Aisyah radhiallahu 'anha narrated that the Prophet Muhammad performed the dhuha prayer as much as four rak'ahs, this is based on HR.Muslim, which reads:

وعن عائشة - رضي الله عنها - قالت: (كان رسول الله صلى الله عليه وسلم يصلي الضحى أربعاً، ويزيد ما شاء الله). (رواه مسلم)

*"Aisha ra said, "The Messenger of Allah used to pray four rak'ah of Duha prayer, and he added it according to his ability, by the will of Allah." (Bassam, 2019)*

Ummu Hani'bint Abi Talib also narrated that the Messenger of Allah (SAW) performed the dhuha prayer for eight cycles after the sun rose in his house at the time of the liberation of the city of Mecca, this statement is contained in the hadith of HR.Muslim, which reads:

عن عبد الله بن الحارث بن نوفل قال سألت وحرصت على أن أجد أحداً من الناس يخبرني أن رسول الله صلى الله عليه وسلم سبح سبحة الضحى فلم أجد أحداً يحدثني ذلك غير أن أم هانئ بنت أبي طالب أخبرتني أن رسول الله صلى الله عليه وسلم أتى بعد ما ارتفع النهار يوم الفتح فأتى بثوب فستر عليه فاغتسل ثم قام فركع ثمانين ركعات لا أدري أقيامه فيها أطول أم ركوعه أم سجوده كل

ذَلِكَ مِنْهُ مُتَقَارِبٌ قَالَتْ فَلَمْ أَرَهُ سَبَّحَهَا قَبْلُ وَلَا بَعْدُ قَالَ الْمُرَادِيُّ عَنْ يُونُسَ وَلَمْ يَقُلْ أَخْبَرَنِي (رواه مسلم)

" From Abdullah bin Al Harith bin Naufal said; "I asked and I really wanted someone to inform me, he said the Messenger of Allah had performed the sunnah dhuha prayer, apparently I did not find anyone to report it, other than (Umm Hani` bint Abu Talib). slightly elevated, namely when the conquest of the city of Mecca, he was given a cloth and he was covered, then he took a bath. After that he stood up and bowed 'eight raka'at, I do not know whether standing longer or bowing, or prostration, all looks pretty much the same." Umm Hani said next; "Though before and after that, I have never seen him perform the sunnah dhuha prayer." Al-Muradi said from Yunus, but Yunus did not say, "He has informed me. " (HR. Muslim) (Bassam, 2019).

Anas radhiallahu anhu explained that the Prophet SAW taught to perform the Duha prayer as many as 12 raka'at, this is stated in the hadith HR. At-Tirmidhi which reads:

وَعَنْ أَنَسٍ—رَضِيَ اللَّهُ عَنْهُ— قَالَ : قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ : (مَنْ صَلَّى الضُّحَى ثِنْتَيْ عَشْرَةَ رَكْعَةً ، بَنَى اللَّهُ لَهُ قَصْرًا فِي الْجَنَّةِ).رَوَاهُ التِّرْمِذِيُّ وَاسْتَعْرَبَهُ.

Dari Anas RA, he said: The Prophet (peace and blessings of Allah be upon him) said, "Whoever performs the dhuha prayer for twelve rak'ahs, then Allaah will build for him a palace in heaven" (At-Tirmidzi, 2017)

In another narration by Abu Dzar radhiallahu anhu, it is also explained that it is permissible to perform dhuha prayers for six or ten rak'ahs, in accordance with HR. Al-Baihaqi, which reads:

عَنْ أَبِي ذَرٍّ قَالَ، قَالَ رَسُولَ اللَّهِ ﷺ: «إِنْ صَلَّى الضُّحَى رَكْعَتَيْنِ لَمْ تُكْتَبْ مِنَ الْعَافِلِينَ ، وَإِنْ صَلَّىهَا أَرْبَعًا كُتِبَتْ مِنَ الْمُحْسِنِينَ ، وَإِنْ صَلَّىهَا سِتًّا كُتِبَتْ مِنَ الْقَائِمِينَ ، وَإِنْ صَلَّىهَا ثَمَانِيًا كُتِبَتْ مِنَ الْفَائِزِينَ ، وَإِنْ صَلَّىهَا عَشْرًا لَمْ يُكْتَبْ لَكَ ذَلِكَ الْيَوْمَ ذَنْبٌ ، وَإِنْ صَلَّىهَا ثِنْتَيْ عَشْرَةَ رَكْعَةً بَنَى اللَّهُ لَكَ بَيْتًا فِي الْجَنَّةِ».

"From Abu Dharr RA he said: The Prophet SAW said: "If you pray Duha two raka'at then it will not be recorded as a negligent person, if you pray four raka'at it will be recorded as a Muslim, if you pray six raka'at then it is recorded as a person who often stands up to pray, if

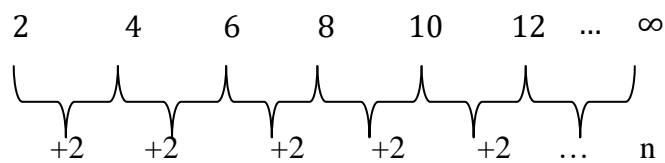
you pray eight raka'at then it is recorded as a successful person/lucky person, if you pray 10 raka'at then your sin will not be recorded on that day, if you pray 12 raka'at then Allah will build a house in heaven for you." (HR al-Baihaqi).

The number of rak'ahs of the Duha prayer which has been explained from the several hadiths above illustrates that the number of rak'ahs of the sunnah prayer of Duha is 2,4,6,8,10, and 12. However, the maximum limit in its implementation is that it has no limits, according to the narration described by Mu' adzah to HR.Muslim which reads:

معاذة أنها سألت عائشة - رضى الله عنها - كم كان رسول الله ﷺ - يصلى صلاة الضحى قالت أربع ركعات ويزيد ما شاء .

Mu'adzah once asked 'Aisyah -radhiyallahu' anha- how many raka'at of Dhuha prayer performed by Rasulullah *sallallaahu 'alaihi wa sallam* ? 'A'ishah replied, " *Four rak'ahs and he adds as he pleases.* "

If we look further at the number of rak'ahs performed and taught by the Prophet to his people, it has a similar pattern, that is, the difference between them is two. If we write in one line, then we will see a pattern like the one below



Judging from the pattern formed from the row of the number of rak'ahs for the dhuha prayer, if we take for example  $n$  is how to carry out the number of rak'ahs for the dhuha prayer based on each hadith and  $U_n$  is the number of rak'ahs, then we will get the pattern:

Suppose  $n = \text{Method no 1}$ , then number of raka'at ( $U_n$ ) =  $2n = 2 \times 1 = 2$

Suppose  $n = \text{Method no 2}$ , then number of raka'at ( $U_n$ ) =  $2n = 2 \times 2 = 4$

Suppose  $n = \text{Method no 3}$ , then number of raka'at ( $U_n$ ) =  $2n = 2 \times 3 = 6$

Suppose  $n = \text{Method no 4}$ , then number of raka'at ( $U_n$ ) =  $2n = 2 \times 4 = 8$

Suppose  $n = \text{Method no 5}$ , then number of raka'at ( $U_n$ ) =  $2n = 2 \times 5 = 10$



Suppose  $n = \text{Method no } 6$ , then number of raka'at  $(U_n) = 2n = 2 \times 6 = 12$

$\vdots$                      $\vdots$           $\vdots$   
 $\vdots$                      $\vdots$           $\vdots$

Suppose  $n = \text{Method no } \infty$ , then number of raka'at  $(U_n) = 2n = 2 \times \infty = \infty$

From the pattern above, we get, if the 1st method ( $n = 1$ ) in carrying out the number of rak'ahs for the dhuha prayer, then  $(U_n) = 2 \cdot n = 2 \cdot 1 = 2$ . If the  $n$  is 2 then it will produce  $(U_n) = 4$ , if the  $n$  is 3 then the result is  $(U_n) = 6$ , if  $n$  is 4 then the result  $(U_n) = 8$ , if  $n$  is 5 then the result  $(U_n) = 10$ , if  $n$  is 6 then the result  $(U_n) = 12$ , and so on until infinity which we symbolize by  $n$ . If  $n$  is equal to  $n$  then the result will be equal to 2 times  $n$  or  $2n$  which symbolizes that  $n$  is an infinite number, which if in mathematics we symbolize it by symbol  $\infty$  (*ifinity*) or we write it with an even number starting from 2, 4, 6, 8, 10, 12, ...,  $\infty$ . From the description of the pattern, we find that the pattern of the number of rak'ahs for the dhuha prayer taught by the Prophet formed an even number pattern, when viewed from the definition of an even number and the general equation for an even number, namely  $2n$  or  $U_n = 2n$ . This is in accordance with mathematical theory in Algebra, which states that an even number is an integer that is divisible by two, has the difference between numbers equal to two, and the general form is  $U_n = 2n$  (Bartle & Sherbert, 2011)(Abdussakir et al., 2006).

## CONCLUSION

The results of the analysis were based on Hadith regarding the number of cycles of dhuha prayer, as well as mathematical theory of numbers, then when arranged in a number row, the number of raka'at of dhuha prayer forms a number pattern known as the even number pattern in mathematics. The general form of the pattern of the number of rak'ahs for the dhuha prayer is the same as the pattern of integers, namely  $U_n = 2n$ .

**REFERENCES**

- Abdussakir. (2009). Matematika 1; Kajian Integratif Matematika dan Al-Qur'an. *UIN-Malang Press*.
- Abdussakir, Pagalay, & Usman. (2006). Analisis sholat melalui logika matematika. *UIN-Malang Press*.
- Al-Bukhari, M. (1978). *Sahih al-bukhari*. Dar Ul-Hadith.
- Al-Qur'an. (2019). *Mushaf Hafalan Utsmani Madinah*. MAANA.
- At-Tirmidzi, A.-I. al-H. M. bin I. bin S. (2017). *Buku Kitab Hadits Sunan at-Tirmidzi Set -Hadis Hadist Imam At Tarmidzi*. Gema Insani.
- Bartle, R. G., & Sherbert, D. R. (2011). *Introduction to Real Analysis*. Hamilton Printing Company.
- Bassam, A. bin A. A. (2019). *Bassam, A. B. A. A. (2019). Syarah Hadits Pilihan Bukhari-Muslim*. Darul Falah.
- Hamzah, A. (2019). *Metode Penelitian Keperpustakaan Library Reseach Kajian Filisofi, Teoritis dan Aplikasi*. Literasi Nusantara.
- Latifah, S. N., & Cecep, A. (2022). Al-Qur'an sebagai Sumber Ilmu Pengetahuan. *Gunung Djati Conference Series*.