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Analysis of Students Learning Difficulties in mathematics on Fractional Material

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Abstract

This research is motivated by students inability to individually solve mathematical problems related to fractions and the assumption that mathematics is a difficult, scary, and boring subject which causes learning outcomes below the KKM of 70. The purpose of this research is to analyze the difficulties experienced by students in mathematics in class V fractional material. The research method used is descriptive qualitative. Data collection is carried out through interview, observation, test, and documentation involving teacher and students in class V.2 SDN Kota Baru VII. Data analysis techniques through data reduction, data display, and conclusion. Research results show that students have difficulty learning fractions, including: (1) difficulty understanding concepts, such as distinguishing between numerators and denominators, applying formulas to calculation operations, and equating denominators to addition and subtraction; (2) difficulty applying principles, such as difficulty in performing calculationsHe also had difficulty solving the story, such as understanding the meaning of the matter, determining the completion step, and identifying what was known and what was asked of the matter. Based on the results, students have difficulty learning fractions and teachers need to pay attention to their different abilities in order to know which fractional material has not been mastered and find the difficulty.

Keywords: learning difficulties, mathematic, fraction.

1 INTRODUCTION

Humans are creatures that grow and develop, so they always want to achieve an optimal life. One way to achieve an optimal life is by taking education. Education is a process of learning and developing potential so that a person can be useful as a productive and responsible society. As stated in the National Education System Law Number 20 of 2003 Article 1 paragraph (1) quoted in (Husamah, et al, 2019) concerning the National Education System states that education is a planned effort with the aim of creating a learning environment where students actively develop their personal potential, including the development of religious abilities, self-control, personality, intelligence, noble morals, and skills needed for personal, community, nation and state interests. The learning process is carried out at all levels of education to determine whether the educational goals that have been set can be achieved or not. Of course, not all of the learning processes that have been carried out have run smoothly, because there are still several problems that have prevented optimal educational goals from being achieved, especially in mathematics learning. Mathematics learning is the process of providing learning experiences to students through planned activities so that they achieve understanding and competency related to the mathematics material being taught (Sudiati, Sri, 2014). In this context, mathematics learning must create an effective learning experience through planning and implementing appropriate learning activities. This implementation can be carried out by actively involving students, so that they can experience in-depth learning and gain a comprehensive understanding of the mathematics material being taught. Mathematics learning in

elementary schools, even though it has been planned, still faces several obstacles, especially due to students' negative views about mathematics. They think mathematics is difficult, scary, and boring, so they are less enthusiastic about learning it. This view causes them difficulties in the process of learning mathematics. Apart from that, mathematical material tends to be more complex and difficult to explain in a concrete way, making it difficult for students to understand it. Thus, mathematics is a science in which the material requires logical and systematic reasoning (Pramesti, 2019). That reasoning is the hallmark of the study of mathematics, because it deals with routine numbers and uses deep understanding. Understanding mathematics has an important role in solving problems in real life, for example when shopping in a store, of course we use mathematical concepts to calculate the total purchases.

The students negative view of mathematics has made them difficult to learn. Learning difficulties for students are certainly different. Students who have difficulty learning mathematics show several characteristics, such as often making mistakes in counting and solving problems, especially storytelling. Learning difficulties can cause students to be ineligible to continue to the next level of learning (Yurinda, et al., 2021. Learning difficulties are an inability to follow learning which leads to low learning outcomes and disadvantages in the learning process (Koswara, 2013). In this context, the student is said to be incapable of absorbing and understanding the subject matter, thus experiencing a loss in terms of his learning progress. This lack of maximum learning achievement is due to obstacles, obstacles, or interference in learning (Ismail, 2016). As stated by Amir and Risnawati quoted in (Kolo, etc., 2021) that learning difficulties are caused by two factors, namely internal and external factors. Internal factors, including: (1) the character of the participant; (2) learning attitude; (3) learning motivation; (4) self-confidence; (6) intelligence; and (7) learning habits. Then, external factors include: (1) family environment; (2) community environment; (3) teachers; and (4) learning media. These two factors, interaction and influence, for example, students with poor character, lack of confidence, and low learning motivation, are influenced from environments that lack support for the development of positive internal factors in students to improve their learning achievements.

In the report of the Programme for International Student Assessment (PISA) organized by the Organization for Economic Co-operation and Development (OECD) in 2018, Indonesian students' mathematical skills ranked 73rd out of 79 countries with an average score of 379. This result indicates that the quality of education in Indonesia is still low, especially in terms of the mathematical ability of Indonesian students to be below the world average. As a result, students in Indonesia face difficulty learning when they follow the math learning process. Speaking of difficulty in learning mathematics, it is certainly related to the inability of students to complete tasks involving numbers or mathematical symbols. In addition, it deals with conceptual issues, both explaining, understanding, applying, and dealing with issues of the use of symbols, numeracy, and understanding of story. As stated by Cooney in (Yusmin), 2017) that difficulty in learning mathematics is grouped into three criteria: (1) difficulty in using mathematical concepts; (2) difficulty in applying mathematical principles; and (3) difficulty in solving verbal problems.

Based on the above criteria, there is more specifically difficulty learning students in fractional materials related to concepts, principles, and solving story problems. As previous studies have found that the difficulty of learning fractions is: (1) difficulty understanding concepts, such as difficulty converting mixed fractions into ordinary fractions, and addition and multiplication of fractions; (2) difficulty in counting skills, such as difficulty in operating numbers; and (3) difficulty solving problemsSome of these are incorrect, such as difficulties in resolving the story (Andri, et al., 2020). In contrast to this study, which focused on three difficulty in learning fractions: (1) difficulty in understanding concepts, including difficulty distinguishing between numerators and denominators, applying formulas to calculation operations, and equating denominators to addition and subtraction; (2) difficulty in applying principles, including difficulty in calculating addition, subtraction, and division of fractions, and having errors in performing calculation operations; and (3) difficulty in

resolving story problems, including difficulty understanding the intent of the problem, determining the completion steps, and identify what is known and what is asked of the matter. Thus, understanding of fractions is very important, as it relates to other materials such as decimal, comparison, scale, and measurement (Nur Hidayah, et al., 2020). The students' lack of understanding of fractional matter can cause them difficulty in resolving other mathematical problems.

Based on the above exposure and preliminary observation results conducted by researchers on August 1, 2022 in the V.2 class of SDN Kota Baru VII, there were 26 students who had difficulty learning math. However, of the 26 students, only a few students had difficulty learning math, especially on fractional matter. The difficulty is to add and subtract two mixed fractions. This is because some students have not been able to convert mixed fractions into ordinary fractions. Furthermore, it is difficult to do decimal division by converting to fractions. This is due to the lack of understanding of the students' share of numbers. Then, when the teacher is explaining the condition of the class, it can be said that it is less conducive and makes the students not focus on what is being said, so when the teacher asks and gives a practice about, they are not able to do it. There are some students who rely only on their friends who are considered capable of completing the training on the issue.

Based on the presentation above, researchers are interested in conducting further and detailed research on "Analysis of the Difficulty of Learning for Students in Mathematics Subjects in Fractional Materials" and formulating three problems: How is the difficulty of students in understanding the concept of fractional materials V SDN class VII?; (2) How is the difficulty of students in applying principles to fractional materials?; and (3) How is the difficulty of the students of V SDN Kota Baru VII class in solving the problem of storytelling in fractional materials? Then, this study aims to analyze the difficulties experienced by students in mathematics subjects in fractional materials of V SDN Kota Baru VII Class Year 2022/2023. This study is important so that later teachers can find out which part of the student has not yet mastered and find the difficulty, so that the results of this study have implications in improving the quality of elementary school math learning, especially in fractional materials.

2 RESEARCH METHODS

This research was carried out at SDN Kota Baru VII which is located on Jl. Korma Tanjakan, Kota Baru, West Bekasi, Bekasi City, West Java involving teachers and 12 class V.2 students as participants. The selection of the 12 students used a purposive sampling technique, because the sampling of the data sources was based on consideration of certain criteria (Sulistiyo, 2019). As these criteria include: (1) students who have learning outcomes in mathematics under the KKM, especially in fractional material; and (2) students who have difficulty learning mathematics, especially fractions. This study uses a qualitative descriptive research method, because the researcher understands the problem and the results of his research are described in depth using detailed words, and in exploring the data is done empirically. Exploring data empirically, meaning that research is carried out by involving the five senses in understanding facts, events and behaviors that occur. According to Kriyantono quoted in (Efendi, 2021) states that this research places more emphasis on the depth of data obtained by researchers, so that the researchers themselves are said to be research instruments. The qualitative descriptive method is carried out by observing an object, interacting, understanding, then recording, showing data, checking objectivity, and making a synthesis (Yahya, 2022). Thus, the procedure for this research was carried out through passive participatory observation, semi-structured interviews, written tests on math problems on fractions, and documentation of test results for students in class V.2 SDN Kota Baru VII. The data that has been obtained is analyzed using the Miles and Huberman model, through the following steps: (1) Data reduction, meaning that the researcher summarizes, then retrieves data that is considered important by classifying

which data is used and which data is not used, so that the researcher focused on the results of interviews and some test results of V.2 class students who showed difficulty learning mathematics in fractional material, including difficulties understanding concepts, applying principles, and solving story problems; (2) Presentation of data, in this study the researcher presented the data in the form of a brief description; and (3) Drawing conclusions, in this study based on what has been obtained by researchers through data collection and seeing which reduction results have been grouped which must be explained and which are not necessary.

3 RESULT AND DISCUSSION

This research was conducted in class V.2 SDN Kota Baru VII with a total of 38 students. However, the researcher only chose 12 students of class V.2 SDN Kota Baru VII as the research sample.

3.1 Sub Result

3.1.1 Difficulties of class V students at SDN Kota Baru VII in understanding the concept of fractions

Based on the data obtained, several facts were found from several participants, namely Mrs. Dina as a V class teacher and several V.2 class students related to the concept of fractions. Mrs. Dina stated that regarding the concept of fractions, many students still lack understanding. In fact, it's been explained in detail, because the concept is the basis. For example, to equate the denominator to the addition or reduction of the fraction of students is difficult, but to distinguish between the numerator and the denominator they already can. In contrast to the students with initials (N) and (R) stated that they had difficulty in distinguishing between numerators and denominators, because they were confused and forgot, so they often switched and made difficulty solving fractional problems. Their statement was corroborated by the test results about number 2 students with initials (N), as follows:

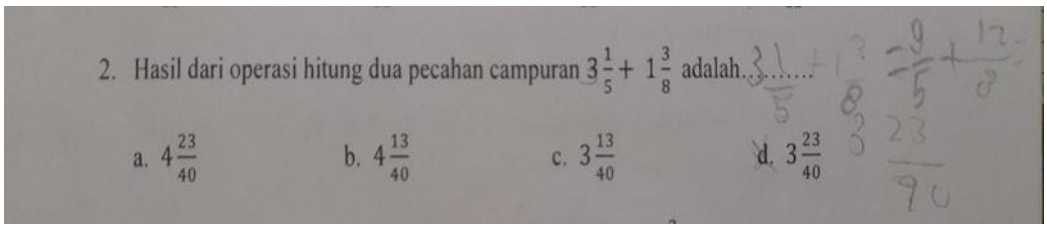


Figure 1. Test Answers for Student Number 2

Then, it was also strengthened by observation made by students with initials (N) that he was confused when he recognized the top part and the bottom part of the fraction, because he asked his friend next to him.

In addition to the above difficulties, Mrs. Dina also stated that another difficulty is to apply addition and subtraction formulas, rather than division of fractions. This happens, because many students don't understand the concept, so even for the working formula they can't. However, Mrs. Dina's statement, in contrast to what the initial student (S) said regarding the difficulty of applying the formula that she had more difficulty in fractional division, because she did not know what the concept was like, and to work on fractional division always asked her formula first. Then, the student with the initials (H) also stated the same thing, that he was very difficult on fractional division, because he did not know what kind of formula to work on, so he sometimes answered the problem and sometimes did not.

Then, when observation is made on the student with initials (N) it also shows the same thing as what the two students said above, which is seen that he has more difficulty in the

problem of using the fractional division formula, because he is working on the problem of looking to his friend for answers.

Based on the above findings, it is seen that understanding the concept of fractions in students is still lacking, thus causing difficulties in equating denominators to addition or subtraction of fractions, forgetting the position to distinguish numerators and denominators. However, in terms of applying the formula, the student is more likely to have difficulty applying the fractional division formula.

3.1.2 Difficulties of Class V students at SDN Kota Baru VII in applying the principle of fractions material

Based on the data that has been obtained, several facts were found from several participants, namely Mrs. Dina as a class V teacher and several class V.2 students related to the principle of fractions. Mrs. Dina stated that regarding the principle of fractions, students experienced different difficulties, some were difficult in calculating addition and subtraction of fractions, and some were difficult in calculating division of fractions. So, again, if they don't know the concept of these three calculation operations, automatically carrying out the next calculation will be difficult. For example, there are fractions that have different denominators, so the concept is to first equate the denominators, then do the calculations according to the question instructions. Usually, the way to do it is to simply multiply the denominator. However, when dividing fractions, students often forget to change the position of the numbers and change to multiplication, so they will have difficulty carrying out division calculations using the appropriate rules. As stated by the student with the initials (R) that he has difficulty subtracting and dividing fractions, while sometimes he can add fractions. This statement is supported by evidence of test results for student number 5 with the initials (R), as follows:

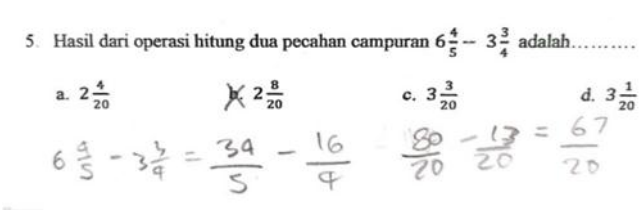


Figure 2. Test Answer for Student Number 5

Then, the student with the initials (H) also revealed that he had difficulty dividing fractions, while addition and subtraction were quite good. This statement is corroborated by evidence of test results for question number 7 of students with the initials (H), as follows:

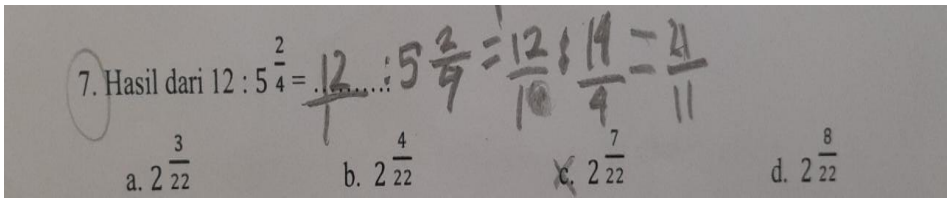


Figure 3. Test Answer for Student Number 7

Then, Mrs. Dina also stated that students experienced errors which caused them to have difficulty solving problems on addition, subtraction or dividing fractions. However, to make mistakes in calculations is rare, more often it is wrong to change mixed fractions to improper fractions. As stated in this statement, it is supported by evidence from the results of test question number 5 of students with the initials (Y) who experienced the error of changing mixed fractions to improper fractions, as follows:

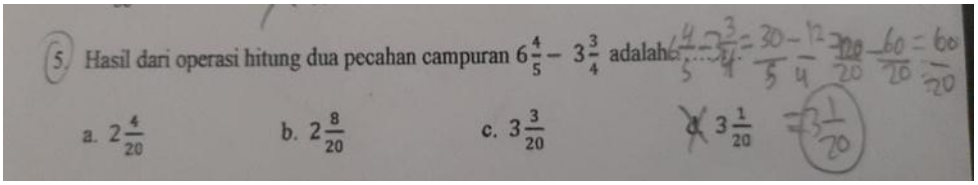


Figure 4. Test Answer for Student Number 5

Then, when observing the student with the initials (Y), it was seen that he made a mistake in adding or subtracting the quantifier for fractions with different denominators. In addition, errors in their calculations are more common in the part of converting mixed fractions into improper fractions.

This is different from the statement made by Mrs. Dina, that students with the initials N stated that they had and often experienced errors or miscalculations in adding, subtracting and dividing fractions, especially when they were panicked and in a rush when the work was about to be finished.

Based on the findings above, it appears that many students are still lacking in applying the principles of fractions through calculating addition, subtraction and division of fractions, making it difficult for them to carry out calculations, especially in dividing fractions rather than adding or subtracting fractions. In addition, an error was found in calculating, which caused them to answer the question incorrectly.

3.1.3 Difficulties of Class V students at SDN Kota Baru VII in Solving Story Problems on Fraction Material

Based on the data that has been obtained, several facts were found from several participants, namely Mrs. Dina as a class V teacher and several class V.2 students related to solving fraction story problems. Mrs. Dina stated that regarding solving fraction word problems, students had difficulties in terms of not understanding the meaning of the questions and only a few students understood the meaning of addition and subtraction questions, because there were already key words. However, when it comes to stories about dividing fractions, many people are still confused and often ask questions. As stated by the student with the initials (S), he still often asks questions about the meaning of the questions and how they should be answered. The reason was because he was confused, didn't understand, and had difficulty reading long story questions.

In addition, Mrs. Dina also stated that another difficulty was making steps to solve the problem. In this case, many students still ask questions regarding the steps to solving the problem. In fact, it has been explained that the steps are divided into 4, namely knowing, asking, answering, and concluding. Maybe it's because many of them still don't understand the meaning of the story questions given, so it's difficult to take steps to solve them. This statement is corroborated by evidence of the test results of question number 8 of students with the initials (S), as follows:

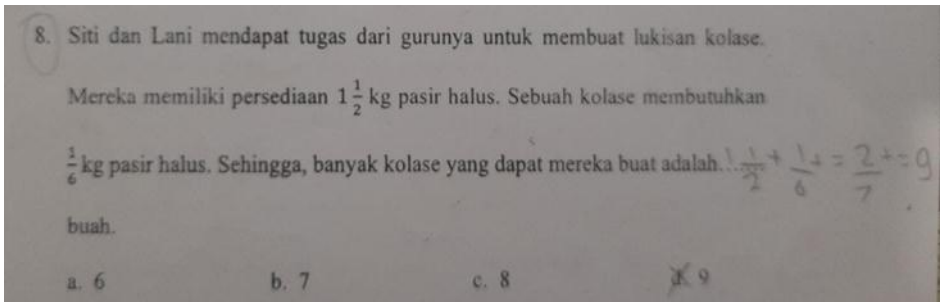
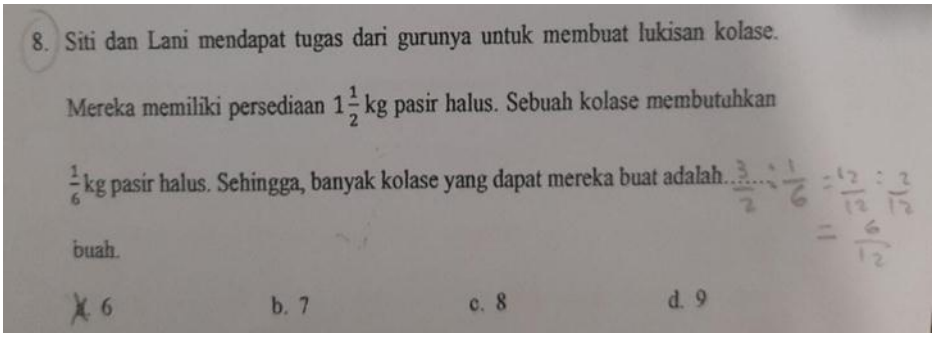


Figure 5. Test Answer for Student Number 8

When seen from the results of observations made on the student with the initials (S), it is true that he did not seem to make the steps to solving word problems, such as knowing, asking, answering, and drawing conclusions while working on the math test.

Then, students with the initials (N) also expressed difficulties in understanding the meaning of the questions and difficulties in making steps to solve word problems. This is shown by the test results in question number 8, as follows:


8. Siti dan Lani mendapat tugas dari gurunya untuk membuat lukisan kolase. Mereka memiliki persediaan $1\frac{1}{2}$ kg pasir halus. Sebuah kolase membutuhkan $\frac{1}{6}$ kg pasir halus. Sehingga, banyak kolase yang dapat mereka buat adalah.... buah.

a. 6 b. 7 c. 8 d. 9

Picture 6. Test Answer for Student Number 8

In addition to the difficulties above, there are also other difficulties regarding determining what is known and what is asked from word problems. As stated by the student with the initials (N) that he only knew what was being asked from a question, but did not know what was known from the problem, because he was confused if the story was long.

Based on the findings above, it can be seen that in solving word problems, students experienced a lot of difficulties in making steps to solve the problem, but in terms of understanding the meaning of word problems, they found it more difficult in dividing fractions than adding or subtracting fractions. In addition, it was found that students only had difficulty identifying what was known about the problem rather than identifying what was being asked about.

3.2 Sub Discussion

3.2.1 Difficulties of class V students at SDN Kota Baru VII in understanding the concept of fractions

Based on the findings of research conducted on 12 students in class V.2, it shows that almost all of them have difficulty understanding the concept of fractions. Starting from difficulty distinguishing between the numerator and denominator, difficulty applying formulas to addition, subtraction and division of fractions, as well as difficulty equalizing the denominators when adding or subtracting fractions.

Difficulty understanding the first concept of fractions, namely, distinguishing between the numerator and the denominator. Where, there were 9 students who had difficulty because they forgot or confused the position of the numerator and denominator of a fraction which caused them confusion when asked and when working on questions.

The second difficulty is when applying formulas to addition, subtraction and fractions. There were 4 students who had difficulty applying the division formula, 2 students who had difficulty applying the subtraction and division formula, and 6 students who had difficulty applying the formula to the three calculation operations. The reason they experienced this difficulty was because they did not know the concept of the formula for the three fraction calculation operations.

The third difficulty is, equating the denominator in adding or subtracting fractions, and there are 10 students who have difficulty. This happens because their understanding of the concept of adding and subtracting fractions with different denominators is still wrong. For example, in the problem of adding fractions with different denominators, students do not first equate the denominators, so they immediately do it by adding. As shown in the results of the research findings above in Figure 1 regarding the test answers of students who had

difficulty understanding the concept of fractions in question number 2, it shows that they did not change mixed fractions into ordinary fractions correctly and did not equate the denominators of the two mixed fractions, but rather he immediately did it by adding up the numerator and multiplying the denominator. Apart from these students, there were 5 other students who worked on question number 2 without equating the denominators and not changing mixed fractions to improper fractions correctly.

The findings of this study are supported by research (Nasiruddin and Hayati, 2019) which shows that difficulties in working on fractional arithmetic operations are caused by students having difficulty understanding the concept and having difficulty distinguishing the denominator and numerator. Then, it can be shown from other research conducted by (Imaroh, 2021) that the difficulties experienced by students are related to completing fraction arithmetic operations in different denominators, because students do not understand the basic concepts of fractions correctly.

The following is a table of research results related to the Analysis of Students' Learning Difficulties in Mathematics in Fractions Material, including difficulties in understanding concepts, difficulties in applying principles, and difficulties in solving word problems.

Table 1. Data on the Number of Students Having Difficulty Understanding the Concept of Fractions

Difficulty understanding the concept	Number of students
Distinguish between numerator and denominator	9
Apply formulas to addition, subtraction and division of fractions	12
Equalize the denominator when adding and subtracting fractions	10

Based on the findings and discussion above, data related to difficulties in understanding the concept of fractions can be seen in table 1. From the data table above, it can be concluded that the biggest difficulties for students are found in the indicator of difficulty applying formulas to addition, subtraction and division of fractions, because as many as 12 students experienced it. However, out of the 12 students, there were 6 students who had more difficulty applying the formula to dividing fractions, compared to adding or subtracting fractions.

3.2.2 Difficulties of class V students at SDN Kota Baru VII in applying the principle of fractions material

Based on the findings of a study conducted on 12 students in class V.2, it was shown that almost all of them experienced difficulties in applying the principle of fractions. Starting from the difficulty in calculating addition, subtraction, and division of fractions, to mistakes when performing arithmetic operations, both in addition, subtraction, and division.

Difficulties in calculating addition and subtraction of fractions, there are 7 students who have difficulty with the reason they don't know how to do it and are often reminded beforehand by the teacher about how to solve it. For example, when calculating the addition and subtraction of fractions that have different denominators, the rule is to make the denominators the same first. Then, when calculating the division of fractions for the 12th students experienced difficulties, so many did not answer questions related to dividing fractions. The reason they experience this difficulty is because they don't know how to calculate fractions in division. In fact, the way to calculate it is by multiplying fractional numbers after the positions of the numerator and denominator are swapped.

Then, difficulties arise due to errors in performing the arithmetic operations of addition, subtraction and division of fractions. In this case, there were 10 students who made mistakes in counting, which made it difficult for them to complete the next step and answered incorrectly. Their reason is that they are in a hurry because the predetermined time will soon be over which causes panic. One example of a mistake is when there is a

question of adding or subtracting mixed fractions, students make mistakes in the process of changing from mixed fractions to ordinary fractions. As found in the research findings above in Figure 2 regarding the test answers of students who have difficulty applying the principle of fractions to problem number 5, it shows that he experienced an error in changing mixed fractions into common fractions which caused him to do the wrong next step and answer incorrectly. , even though he has the same denominator.

Then, there was another student's test answer who had an error in question number 5 which is shown in Figure 4, that he was wrong when changing a mixed fraction into an ordinary fraction, which caused him to make the wrong step in completing the calculation of subtracting the two mixed fractions. Apart from these two students, there were 6 other students who did problem number 5 incorrectly when changing mixed fractions into common fractions which caused them to make the wrong steps to complete the calculation of subtraction of two mixed fractions and difficulty in calculating subtraction.

In addition to difficulties with question number 5, the research findings also found students who had difficulty with problem number 7 which is shown in Figure 3. The test answers showed that students did the division of fractions not by counting using multiplication of fractions, so they made mistakes. in his calculations. In addition to these students, there were 9 other students who had difficulty calculating fraction division and some did not even answer question number 7 at all.

The findings of this study are supported by research conducted (Arsyad and Abdul Hakim, 2019) which shows that the difficulties experienced by students are caused by errors or mistakes in counting, especially in the matter of adding fractions.

Table 2. Data on the Number of Students with Difficulty Applying the Principle of Fractions

Difficulty Applying Principles	Number of Student
Perform calculations for adding and subtracting fractions	7
Perform fraction division calculations	12
Making mistakes in performing calculation operations	10

Based on the findings and discussion above, data related to difficulties in applying fractional principles can be seen in table 2. From the data table above, it can be concluded that the students' greatest difficulty lies in the difficulty indicator for calculating fraction division, because as many as 12 students experienced it.

3.2.3 Difficulties of class V students at SDN Kota Baru VII in Solving Story Problems on Fraction Material

Based on the findings of a study conducted on 12 students in class V.2, it was shown that almost all of them experienced difficulties in solving word problems. Starting from the difficulty of understanding the purpose of the problem, determining the steps for solving it, to the difficulty of identifying what is known and what is being asked from story problems.

The first difficulty is understanding the meaning of the story problem. In this difficulty, there were 9 students who did not understand word problems related to addition and subtraction. However, for the story questions related to the 12th division, students were unable to understand the meaning of the story questions. Their reason is because they are still often confused, so they often ask what the question means, either from their teacher or their friends. In fact, there are keywords for adding and subtracting fractions.

Then, the second difficulty, namely determining the steps to solve the problem, indeed the 12 students were declared to have difficulty, because they did not make the steps to solve it. This can be seen in their test results where they don't take any steps to solve it at all, so they just do it straight away. In fact, Mrs. Dina, as the class teacher, has explained that in making the solution steps, you must know, ask, answer, and add a conclusion.

Finally, the third difficulty is determining what is known and what is being asked about. In this difficulty there is only 1 student who has difficulty. This is because he is not careful and is lazy about reading long story questions, which makes it difficult for him to determine what is known and what is asked about the question. As shown in the research findings above in Figure 5 regarding the test answers of students who had difficulty in solving story problems related to fractions in question number 8, it shows that they did not understand the meaning of the questions, because they answered by adding them. In fact, the question is answered using division calculations. Apart from that, students do not make steps to solve story problems, such as knowing, asking, answering and concluding, but just do it straight away.

Then, there are other students' test answers who experienced difficulties when solving the story problem in number 8 which is shown in Figure 6. This student's test answer shows that he already understands the meaning of the story problem, but does not take the steps to solve it as known, asked, answers, and conclusions, but just do it right away. Apart from these two students, there were 10 other students who did not make the completion steps and did not understand the meaning of story question number 8.

The findings of this research are similar to the results of research conducted by (Labibah, et al, 2021) showing that difficulties in solving word problems are caused by errors in reading keywords in the questions, not knowing what problems need to be solved, and not writing down the steps to solve them in the form of a final conclusion.

Table 3. Data on the Number of Students Having Difficulty Solving Fraction Story Problems

Difficulty Solving Story Problems	Number of Student
Understand the meaning of addition and subtraction word problems	9
Understand the purpose of the division story	12
Determine the steps to solve the story problem	12
Identify what is known and what is asked	1

Based on the findings and discussion above, data related to difficulties in solving fraction story problems can be seen in table 3. From the data in the table above, it can be concluded that the greatest difficulty for students is in the indicators of difficulty understanding the meaning of division story problems for 12 students and the indicators of difficulty determine the steps to solve story problems for 12 students.

4 CONCLUSION

The conclusions from the research results regarding the Analysis of Students' Learning Difficulties in Mathematics Subjects on Class V Fraction Material at SDN Kota Baru VII are: (1) almost all students experience difficulty in understanding the concept of fraction material, such as distinguishing between numerator and denominator, applying formulas to adding, subtracting, and dividing fractions, as well as equalizing the denominator in adding or subtracting fractions. In this case, the difficulty of applying the formula for adding, subtracting and dividing fractions was concluded to be the highest, because all 12 students experienced this because they did not know the concept of the formula for the three fraction calculation operations, (2) almost all students experienced difficulty in applying it. principles of fractional material, such as performing addition, subtraction and division of fractions, as well as making mistakes in performing arithmetic operations. In

this case, the difficulty in calculating fraction division was concluded to be the highest, because all 12 students experienced it because they did not know how to calculate fractions in division using fractional multiplication calculations, and (3) almost all students experienced difficulty in solving word problems. Fraction material, such as understanding the meaning of the problem, determining the steps to solving it, and identifying what is known and what is asked about the story problem. In this case, the difficulty in understanding the meaning of the division story questions and determining the steps to solve the questions was concluded to be the highest, because the 12 students experienced this because there were no keywords in the story questions related to division, so they were confused and did not know what the steps were in solving the story problems. the. Thus, teachers need to pay attention to the different abilities of students so they can find out which parts of the fraction material have not been mastered and find where the difficulties lie.

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