ISRG Journal of Multidisciplinary Studies (ISRGJMS)

ISRG PUBLISHERS
Abbreviated Key Title: isrg j. multidiscip. Stud.
ISSN: 2584-0452 (Online)
Journal homepage: https://isrgpublishers.com/isrgjms/
Volume – IV, Issue – IX (September) 2026
Frequency: Monthly

Mathematical Problem-Solving Ability of Eighth-Grade Students in Flat-Sided Solid Geometry

Anastasia Resli Panoto[1*], Selvi Rajuaty Tandiseru[2], Evy Lalan Langi[3]

[1, 2, 3] Master of Mathematics Education Program, Universitas Kristen Indonesia Toraja Jl. Jenderal Sudirman Number 9 Makale 91811, Tana Toraja

| **Received:** 04.09.2026 | **Accepted:** 08.09.2026 | **Published:** 12.09.2026

***Corresponding author:** Anastasia Resli Panoto

Abstract

This study aims to analyze the mathematical problem-solving ability of eighth-grade students in solving problems involving flat-sided solid geometry at Pato Nonongan Catholic Junior High School. The study employed a descriptive quantitative approach involving 20 eighth-grade students as research participants. Data were collected using a mathematical problem-solving test consisting of five essay questions, with an allocated completion time of 120 minutes. The test was developed based on Polya's problem-solving framework, which consists of four stages: understanding the problem, devising a plan, carrying out the plan, and looking back. The results showed that all students (100%) were able to understand the problems by identifying the known information and what was being asked. However, only 50% of the students were able to devise an appropriate solution strategy, while 40% were able to carry out the planned solution. Furthermore, only 20% of the students were able to solve the problems correctly and systematically. These findings indicate that the students' overall mathematical problem-solving ability in flat-sided solid geometry was still relatively low. The main difficulties were found in selecting appropriate solution strategies, applying mathematical concepts and procedures, and carrying out calculations accurately. Other factors contributing to students' difficulties included limited conceptual understanding, weak mathematical connections, insufficient experience with varied problem-solving tasks, and difficulties in visualizing three-dimensional geometric objects. The findings highlight the need for mathematics instruction that provides systematic and varied problem-solving experiences and supports students in developing conceptual understanding and spatial visualization skills.

Keywords: *Mathematical problem solving; flat-sided solid geometry; problem-solving ability; Polya's problem-solving framework; junior high school students*

DOI: 10.5281/zenodo.22722477

INTRODUCTION

Mathematics is a universal discipline that plays an important role in various fields of knowledge and in everyday life. Mathematical knowledge is used not only to perform calculations but also to communicate information, recognize patterns, make logical decisions, and solve problems. Rahmawati (2020) emphasizes the relevance of mathematics to various aspects of everyday life, while Abdurrahman (1999) explains that learning mathematics can develop logical thinking, accuracy, spatial awareness, and the ability to address challenging problems. Therefore, mathematics education has an important role in preparing students to think systematically and respond effectively to problems encountered in both academic and real-life contexts.

One of the essential competencies that students need to develop through mathematics learning is mathematical problem-solving ability. Mathematical problem solving involves more than obtaining a correct numerical answer; it requires students to understand a problem, identify relevant information, determine an appropriate strategy, apply mathematical concepts and procedures, and evaluate the solution obtained. Hidayat and Sariningsih (2018) state that mathematical problem-solving ability is important because it enables students to deal with problematic situations in everyday life. Similarly, Hendriana et al. (2017) emphasize that mathematical problem solving contributes to the development of students' higher-order thinking processes. Thus, problem-solving ability should become an integral part of mathematics learning rather than being treated merely as an additional skill.

The importance of problem solving is also reflected in mathematics education standards. The National Council of Teachers of Mathematics (NCTM, 2000) identifies problem solving as one of the fundamental process standards in mathematics education. Students are expected to develop the ability to solve problems by applying mathematical knowledge in various situations. In the Indonesian educational context, mathematical problem solving is likewise recognized as an important competency in mathematics learning. Consequently, classroom instruction needs to provide students with opportunities to encounter and solve non-routine and contextual mathematical problems.

One of the mathematical topics that requires strong problem-solving ability is flat-sided solid geometry. This topic involves geometric objects such as cubes, rectangular prisms, prisms, and pyramids. Students are expected to understand the characteristics and properties of these objects and apply concepts related to surface area, volume, and other geometric relationships. Learning this topic requires students to connect visual representations with mathematical concepts and procedures. However, students may experience difficulties in visualizing three-dimensional objects, identifying their properties, selecting appropriate formulas, and applying those formulas to contextual problems.

The difficulties associated with learning solid geometry may affect students' mathematical problem-solving performance. Novita et al. (2018) reported that students may encounter difficulties when visualizing geometric objects and determining the properties of solid figures. Such difficulties can become more apparent when students are required to solve problems that involve several steps or require the integration of different mathematical concepts. Krismiati (2013) also found that junior high school students may experience difficulties in understanding problems, planning solutions, carrying out solution procedures, and checking the results obtained. These findings suggest that students' difficulties in geometry are not limited to mathematical calculations but may occur throughout the problem-solving process.

Polya (1973) proposed a systematic framework for mathematical problem solving consisting of four stages: understanding the problem, devising a plan, carrying out the plan, and looking back. The first stage requires students to identify the information given and determine what needs to be found. The second stage involves selecting an appropriate strategy or mathematical concept. The third stage requires students to implement the strategy accurately, while the final stage involves checking the solution and considering whether the answer is reasonable. This framework provides a useful basis for analyzing students' problem-solving processes and identifying the stages at which difficulties occur.

Previous research has indicated that students often demonstrate better performance in understanding problems than in planning and implementing solutions. Putra et al. (2018), for example, found that students experienced difficulties in solving flat-sided solid geometry problems, particularly when they were required to connect mathematical concepts with applications in everyday situations. These findings indicate that students may be able to identify information presented in a problem but may struggle when they need to determine how that information should be used to construct a solution.

The ability to connect mathematical concepts is particularly important in solving geometry problems. Students need to recognize the relationships between known information, geometric properties, formulas, and the context of the problem. Without adequate conceptual understanding, students may select formulas based only on superficial characteristics of the problem or apply procedures without understanding their relevance. Ruseffendi (2006) and Suherman et al. (2003) emphasize the importance of meaningful mathematics learning in developing students' ability to apply mathematical concepts in problem-solving situations.

In addition to conceptual understanding, spatial visualization is another important factor in solving problems involving three-dimensional objects. Students who have difficulty visualizing the shape, dimensions, or relationships among elements of a solid figure may struggle to determine an appropriate strategy. Therefore, mathematics learning on flat-sided solid geometry should provide sufficient opportunities for students to work with visual representations, physical models, diagrams, and contextual problems.

Based on these considerations, it is important to examine students' mathematical problem-solving ability specifically in the context of flat-sided solid geometry. An analysis of students' performance at each stage of Polya's framework can provide a more detailed understanding of their strengths and difficulties. Such information is useful for teachers in designing learning activities that address students' specific needs rather than focusing solely on the correctness of final answers.

Therefore, this study aims to analyze the mathematical problem-solving ability of eighth-grade students at Pato Nonongan Catholic Junior High School in solving flat-sided solid geometry problems. The analysis focuses on students' abilities to understand problems, devise solution strategies, carry out the planned solutions, and check or obtain correct solutions systematically. The findings are expected to provide information that can support mathematics teachers in developing learning strategies that strengthen students'

DOI: 10.5281/zenodo.22722477

conceptual understanding, problem-solving skills, and spatial visualization abilities.

METHODE

Research Design

This study employed a descriptive quantitative approach to analyze the mathematical problem-solving ability of eighth-grade students in solving problems involving flat-sided solid geometry. The descriptive quantitative approach was selected because the study focused on describing students' abilities at each stage of the problem-solving process based on the data obtained from the mathematical problem-solving test. The analysis was conducted without applying an experimental treatment or comparing students' achievement before and after an intervention.

Research Participants and Setting

The study was conducted at Pato Nonongan Catholic Junior High School and involved 20 eighth-grade students as research participants. The participants were selected purposively based on the consideration that they had received mathematics instruction related to flat-sided solid geometry. The participants were therefore considered to have relevant learning experiences to solve the mathematical problems provided in the study.

Research Instrument

The main instrument used in this study was a mathematical problem-solving test consisting of five essay questions related to flat-sided solid geometry. The test was administered with a completion time of 120 minutes. Essay questions were used to allow students to demonstrate their problem-solving processes, rather than merely provide final answers.

The test was developed based on Polya's problem-solving framework, which consists of four stages: (1) understanding the problem, (2) devising a plan, (3) carrying out the plan, and (4) looking back or checking the solution. These stages were used as a framework for identifying the students' performance in solving mathematical problems.

The scoring rubric was organized according to the problem-solving stages. The understanding stage was scored from 0 to 2, the planning stage from 0 to 3, the implementation stage from 0 to 5, and the checking stage from 0 to 2. The students' responses were examined based on their ability to identify relevant information, determine what was required, select an appropriate strategy, apply mathematical concepts and procedures, perform calculations, and verify their solutions.

Data Collection

Data were collected through the administration of the mathematical problem-solving test. Students were asked to complete all five essay questions independently within the allocated time. Their written responses were then collected and analyzed according to the predetermined problem-solving indicators.

The analysis focused on identifying the proportion of students who demonstrated competence at each stage of the problem-solving process. The results were presented descriptively using frequencies and percentages to provide an overview of students' mathematical problem-solving ability.

Data Analysis

The data were analyzed descriptively by examining students' responses based on the four stages of Polya's problem-solving framework. First, the students' answers were examined to determine whether they were able to understand the information contained in each problem. Second, their ability to devise an appropriate solution strategy was analyzed. Third, the students' ability to carry out the planned strategy through the appropriate use of mathematical concepts, formulas, and calculations was examined. Finally, their overall solutions were reviewed to determine whether they were able to obtain correct and systematic answers.

The results were subsequently calculated in the form of frequencies and percentages and interpreted to identify the strengths and difficulties experienced by the students in solving flat-sided solid geometry problems.

RESULTS AND DISCUSSION

Results

The results of this study describe the mathematical problem-solving ability of Grade VIII students in solving problems related to flat-sided solid geometry. The students' abilities were analyzed based on four stages of problem solving adapted from Polya: (1) understanding the problem, (2) devising a plan, (3) carrying out the plan, and (4) obtaining a correct solution through systematic problem-solving procedures. The results are presented based on the students' performance at each stage.

1. **Students' Ability to Understand the Problem**

The results showed that all 20 students (100%) were able to understand the problems presented. At this stage, students were able to identify the information provided in the problems and determine what was being asked. This finding indicates that students generally had no significant difficulty interpreting the basic information contained in problems involving flat-sided solid geometry.

The ability to understand a problem is an important initial stage in mathematical problem solving because students need to recognize the known information, identify the question, and determine the relationship between the two before proceeding to the next stage. The fact that all students were able to complete this stage suggests that they had sufficient initial comprehension of the problems presented.

2. **Students' Ability to Devise a Plan**

Although all students were able to understand the problems, their performance decreased at the planning stage. Only 10 students (50%) were able to devise an appropriate strategy for solving the problems.

This result indicates that understanding the information in a problem does not necessarily mean that students are able to determine an appropriate solution strategy. Some students appeared to have difficulty connecting the information given in the problem with the mathematical concepts or formulas required to solve it. In problems involving flat-sided solids, students need to identify the relevant characteristics of the solid and select an appropriate formula or procedure based on the information provided.

DOI: 10.5281/zenodo.22722477

The findings suggest that students need greater opportunities to practice selecting appropriate strategies rather than merely applying memorized formulas. Problem-solving activities should therefore encourage students to analyze the problem first and explain why a particular strategy or formula is appropriate.

3. Students' Ability to Carry Out the Solution Plan

The results further showed that only 8 students (40%) were able to carry out their solution plans appropriately. This percentage was lower than that of the students who were able to devise a plan.

The difficulty at this stage indicates that some students who had identified an appropriate strategy were still unable to implement it correctly. Students encountered difficulties in applying formulas, performing calculations, and maintaining the correct sequence of solution procedures. This finding suggests that students' conceptual understanding of flat-sided solid geometry was not yet fully developed.

In particular, difficulties may occur when students need to determine whether a problem requires the calculation of surface area or volume and then apply the corresponding formula correctly. Therefore, students need to develop not only procedural knowledge but also conceptual understanding of the mathematical relationships underlying the formulas.

4. Students' Ability to Obtain a Correct Solution

Only 4 students (20%) were able to solve the problems correctly and systematically according to the expected problem-solving procedures. This result demonstrates that although most students were able to understand the problems, only a small proportion were able to successfully complete the entire problem-solving process.

The substantial decrease from 100% at the understanding stage to 20% at the stage of obtaining a correct solution indicates that the main difficulties occurred after students had interpreted the problems. The findings particularly highlight weaknesses in planning, implementing solution strategies, and ensuring the correctness of the final answer.

Overall, the students' mathematical problem-solving ability can therefore be characterized as relatively weak, particularly in the higher stages of the problem-solving process. Students require further guidance and practice to develop the ability to connect mathematical concepts, select appropriate strategies, execute procedures accurately, and evaluate their solutions.

Discussion

The findings of this study indicate that the mathematical problem-solving ability of eighth-grade students in flat-sided solid geometry varied across the different stages of the problem-solving process. Although all students were able to understand the problems, a substantial decrease was observed when they were required to devise and implement solution strategies. This finding suggests that understanding the information presented in a mathematical problem does not necessarily guarantee that students are able to develop an appropriate strategy and carry it out correctly.

Students' Ability to Understand the Problem

The results showed that all 20 students (100%) were able to understand the problems presented in the test. At this stage, students were generally able to identify the information that was known and determine what was being asked. This finding indicates that students had sufficient initial comprehension of the mathematical situations presented in the questions.

Understanding the problem is an essential first step in mathematical problem solving because students need to recognize the relevant information before determining an appropriate strategy. According to Polya's framework, failure to understand the problem may prevent students from proceeding effectively to the subsequent stages. In this study, however, the students' difficulty did not primarily occur at the comprehension stage. Instead, their difficulties became more apparent when they were required to transform their understanding of the problem into a mathematical strategy.

The finding is consistent with the view that mathematical problem solving involves more than identifying known and unknown information. Students also need to connect the information in the problem with appropriate mathematical concepts and procedures. Therefore, although the students demonstrated relatively good performance in understanding the problems, further support was needed to help them move from comprehension toward strategic mathematical reasoning.

Students' Ability to Devise a Plan

The results showed that only 10 students (50%) were able to devise an appropriate solution strategy. This means that half of the participants experienced difficulties when determining how the problems should be solved. Some students were able to identify the relevant information but were not able to determine which mathematical concept, formula, or procedure should be applied.

This finding demonstrates that selecting an appropriate strategy is one of the important challenges in mathematical problem solving. In flat-sided solid geometry, students are required not only to remember formulas but also to determine which formula is relevant to the characteristics of the problem. For example, students may need to distinguish between problems involving surface area and those involving volume and identify the dimensions that are relevant to the calculation.

The difficulty in devising a plan may also indicate limited connections between students' conceptual knowledge and procedural knowledge. Knowing a formula does not automatically mean that students understand when and how the formula should be used. Mathematical problem solving requires students to interpret the situation, connect it with previously learned concepts, and select an appropriate procedure.

This finding supports NCTM's perspective that problem solving is an integral component of mathematics learning and should involve students in developing and applying strategies rather than merely memorizing mathematical procedures. Therefore, classroom activities should provide students with opportunities to compare different solution strategies and explain why a particular strategy is appropriate for a given problem.

Students' Ability to Carry Out the Plan

Only 8 students (40%) were able to carry out the planned solution appropriately. The percentage at this stage was lower than that of students who were able to devise a plan. This indicates that some students who were able to identify a possible strategy still experienced difficulties when implementing it.

The difficulties observed at this stage were related to the application of mathematical concepts and procedures, the use of

DOI: 10.5281/zenodo.22722477

formulas, and the accuracy of calculations. Students may have selected a potentially appropriate formula but were unable to apply it correctly to the information provided in the problem. Errors in substituting values, performing calculations, or organizing the solution could consequently lead to incorrect final answers.

This finding highlights the distinction between knowing a mathematical procedure and being able to use it appropriately in a problem-solving situation. Students need procedural fluency as well as conceptual understanding to successfully implement a solution strategy. In geometry, this is particularly important because students must understand the relationship between the dimensions of a three-dimensional object and the mathematical quantities being determined.

Therefore, mathematics instruction should not focus solely on formula memorization. Students need opportunities to explain the meaning of formulas, identify the quantities represented by each variable, and apply formulas in various problem contexts. Such activities can help students develop a stronger connection between conceptual understanding and procedural application.

Students' Overall Problem-Solving Performance

The results further showed that only 4 students (20%) were able to solve the problems correctly and systematically. This result indicates that the majority of students had not yet demonstrated consistent competence throughout the problem-solving process. Although all students were able to understand the problems, only a smaller proportion could successfully transform their understanding into an appropriate plan and subsequently implement that plan to obtain a correct solution.

The considerable decrease from 100% at the understanding stage to 20% in overall successful problem solving illustrates that the main challenge was not simply reading or comprehending the problem. Rather, students experienced greater difficulty in mathematical reasoning, strategy selection, procedural application, and accurate calculation.

These findings are in line with the principles of mathematical problem solving proposed by Polya, in which successful problem solving requires a sequence of interconnected processes. A weakness at the planning or implementation stage can affect the quality of the final solution. Consequently, students need to be accustomed to solving non-routine and contextual problems that require them to think about how a problem should be approached rather than simply recall a previously practiced formula.

Factors Contributing to Students' Difficulties

Several factors may be associated with the students' difficulties in solving flat-sided solid geometry problems. First, limited conceptual understanding may make it difficult for students to determine the mathematical relationships contained in a problem. Second, weak mathematical connections may prevent students from connecting the given information with previously learned concepts. Third, limited experience with varied problem-solving tasks may cause students to depend heavily on familiar examples and formulas.

Another important factor is students' difficulty in visualizing three-dimensional objects. Flat-sided solid geometry requires students to understand spatial relationships among faces, edges, vertices, lengths, widths, heights, and other dimensions. When students have difficulty constructing an appropriate mental representation of an object, they may also experience difficulties in determining the information needed to solve the problem.

The findings therefore suggest that mathematics learning should provide students with systematic opportunities to develop conceptual understanding, mathematical connections, strategic thinking, and spatial visualization. Teachers can use concrete geometric models, drawings, diagrams, and digital visualization tools to help students represent three-dimensional objects more effectively. In addition, students should be encouraged to explain their reasoning, compare different strategies, and check whether their answers are reasonable in relation to the original problem.

Overall, the findings confirm that mathematical problem-solving ability involves a complex process that cannot be measured solely by students' ability to obtain a final numerical answer. Students need to understand the problem, formulate an appropriate strategy, apply mathematical procedures accurately, and reflect on the resulting solution. Strengthening these interconnected abilities is particularly important in learning flat-sided solid geometry, where conceptual understanding and spatial visualization play an important role.

CONCLUSION

This study concludes that the mathematical problem-solving ability of eighth-grade students in solving flat-sided solid geometry problems was still relatively low. Although all students (100%) were able to understand the problems by identifying the known information and determining what was being asked, only 50% were able to devise an appropriate solution strategy, and 40% were able to carry out the planned strategy appropriately. Furthermore, only 20% of the students were able to produce correct and systematic solutions.

These findings indicate that students' main difficulties were not in understanding the information presented in the problems, but rather in selecting appropriate strategies, connecting mathematical concepts with problem situations, applying formulas and procedures, and performing calculations accurately. Difficulties in visualizing three-dimensional geometric objects were also identified as an important challenge in solving flat-sided solid geometry problems.

Therefore, mathematics instruction should provide students with systematic and varied opportunities to practice mathematical problem solving. Learning activities should emphasize conceptual understanding, strategic thinking, spatial visualization, and students' ability to explain and evaluate their solution processes. The use of concrete models, diagrams, and appropriate digital visualization media may also support students in developing a better understanding of three-dimensional geometric objects. Future studies may investigate instructional strategies or learning models specifically designed to strengthen students' problem-solving ability in geometry.

APPENDIX

Appendix 1. Mathematical Problem-Solving Test

The mathematical problem-solving test consisted of five essay questions related to flat-sided solid geometry. The questions were designed to assess students' ability to understand, plan, and solve mathematical problems based on Polya's problem-solving framework.

DOI: 10.5281/zenodo.22722477

Instructions:

1. Read each problem carefully.
2. Identify the information that is known and what is being asked.
3. Write down the strategy or plan you will use to solve the problem.
4. Show all calculation steps clearly.
5. Write the final answer and, when possible, check whether your answer is reasonable.

Appendix 2. Problem-Solving Assessment Indicators

Problem-Solving Stage	Indicators
Understanding the Problem	Students identify the relevant information, known quantities, and what is being asked.
Devising a Plan	Students determine an appropriate mathematical concept, formula, or strategy to solve the problem.
Carrying Out the Plan	Students apply the selected strategy, formula, and mathematical procedures accurately.
Looking Back	Students review their solution, check the accuracy of the calculations, and relate the result to the original problem.

Appendix 3. Scoring Rubric

Stage	Score Range	Assessment Focus
Understanding the Problem	0–2	Identification of known information and the question being asked
Devising a Plan	0–3	Selection and formulation of an appropriate solution strategy
Carrying Out the Plan	0–5	Application of concepts, formulas, procedures, and calculations
Looking Back	0–2	Verification and evaluation of the solution

Appendix 4. Documentation

The documentation of the research activities includes photographs and supporting materials related to the administration of the mathematical problem-solving test at Pato Nonongan Catholic Junior High School. The documentation is provided as supplementary evidence of the research implementation.

ACKNOWLEDGMENT

The author would like to express sincere gratitude to the principal, mathematics teacher and eighth-grade students of Pato Nonongan Catholic Junior High School for their support, cooperation, and participation throughout the research process. Their willingness to provide the necessary opportunities and information greatly contributed to the completion of this study.

The author also extends sincere appreciation to the lecturers, supervisors, colleagues, and all parties who provided guidance, suggestions, encouragement, and support during the preparation and completion of this research. Finally, the author is grateful to family and friends for their continuous support and encouragement throughout the research and writing process.

The author hopes that the findings of this study may contribute to the development of mathematics learning, particularly in strengthening students' mathematical problem-solving ability in flat-sided solid geometry.

REFERENCES

1. Asikin, M. (2012). Daspros Pembelajaran Matematika I. Semarang: Universitas Negeri Semarang.
2. Hudojo, H. (2005). Pengembangan Kurikulum dan Pembelajaran Matematika. Malang: Universitas Negeri Malang.
3. Kemendikbud. (2016). Peraturan Menteri Pendidikan dan Kebudayaan Nomor 21 Tahun 2016 tentang Standar Isi Pendidikan Dasar dan Menengah. Jakarta: Kemendikbud.
4. NCTM. (2000). Principles and Standards for School Mathematics. Reston, VA: NCTM.
5. Polya, G. (1973). How to Solve It: A New Aspect of Mathematical Method. Princeton: Princeton University Press.
6. Ruseffendi, E.T. (2006). Pengantar kepada Membantu Guru Mengembangkan Kompetensinya dalam Pengajaran Matematika untuk Meningkatkan CBSA. Bandung: Tarsito.
7. Suherman, E., dkk. (2003). Strategi Pembelajaran Matematika Kontemporer. Bandung: JICA.
8. Sumarmo, U. (2005). Pengembangan Berpikir Matematik Tingkat Tinggi Siswa SLTP dan SMU serta Mahasiswa Strata Satu melalui Berbagai Pendekatan Pembelajaran. Laporan Penelitian. Bandung: Universitas Pendidikan Indonesia.
9. Wardhani, S. (2010). Pembelajaran Kemampuan Pemecahan Masalah Matematika di SMP. Yogyakarta: PPPPTK Matematika.
10. Wijaya, A. (2012). Pendidikan Matematika Realistik: Suatu Alternatif Pendekatan Pembelajaran Matematika. Yogyakarta: Graha Ilmu.
11. Eko Siswanto, dkk. (2024). Kemampuan Pemecahan Masalah Pada Pembelajaran Matematika: JRPMS
12. Batubara, N. K., & Reflina, R. (2023). Analisis Kemampuan Pemecahan Masalah Matematis Siswa pada Pokok Bahasan Program Linier Berdasarkan Tingkat Intelligence Quotient. AXIOM : Jurnal Pendidikan Dan https://doi.org/10.30821/axiom.v11i2.12510 Matematika
13. Herman, T. (2000). Strategi pemecahan masalah (problem solving) dalam pembelajaran matematika. Makalah. Tidak Diterbitkan, 1-12. Maghfiroh, Z. D., & Sukamto, S. (2021). Analisis Kemampuan Pemecahan Masalah Matematis Siswa SD Berdasarkan Langkah Polya. DWIJALOKA Jurnal Pendidikan Dasar dan Menengah, 2(1), 72-80.

DOI: 10.5281/zenodo.22722477

14. Dhestriana Kharen, dkk. (2023). Kemampuan Pemecahan Masalah Matematis Siswa Sekolah Dasar: Jurnal Education.

DOI: 10.5281/zenodo.22722477