Students' Mathematical Problem-Solving Ability Based on The Level of Learning Outcomes on Sequence and Series

by Risnawati Risnawati

Submission date: 04-Apr-2023 12:16PM (UTC+0700)
Submission ID: 2055377862
File name: snawati_-_Mathematical_Problem-Solving_-_Sequence_and_Series.pdf (532.65K)
Word count: 4117
Character count: 23270

p-ISSN: 2086-4280
e-ISSN: 2527-8827

Students' Mathematical Problem-Solving Ability Based on The Level of Learning Outcomes on Sequence and Series

Risnawati[1], Mayu Syahwela[2*], Zubaidah Amir MZ[3]

Postgraduate, UIN Sultan Syarif Kasim
Jalan HR. Soebrantas No.Km. 15, RW.15, Simpang Baru, Kota Pekanbaru, Riau, Indonesia
[1]risnawati@uin-suska.ac.id

Mathematics Education, UIN Sultan Syarif Kasim
Jalan HR. Soebrantas No.Km. 15, RW.15, Simpang Baru, Kota Pekanbaru, Riau, Indonesia
[2*]mayu.syahwela@uin-suska.ac.id; [3]zubaidah.amir@uin-suska.ac.id

Article received: 24-08-2022, revised: 17-01-2023, published: 31-01-2023

Abstrak

Pembelajaran difungsikan sebagai wadah siswa dalam mengembangkan diri sebelum terjun ke masyarakat. Kemampuan pemecahan masalah matematis menjadi salah satu kemampuan yang penting bagi siswa dalam menyelesaikan tantangan di abad 21. Penelitian ini bertujuan untuk menganalisis kemampuan pemecahan masalah siswa ditinjau dari tingkat hasil belajar siswa. Jenis penelitian ini adalah penelitian kualitatif dengan pendekatan deskriptif. Subjek penelitian sebanyak 6 siswa berasal dari kelas XI SMA. Data diambil pada semester ganjil Tahun ajaran 2022/2023. Teknik pengumpulan data adalah tes dan wawancara. Hasil penelitian menunjukkan bahwa (1) siswa tingkatan rendah hanya dapat melakukan tahapan memahami informasi, (2) siswa tingkatan sedang dapat melakukan tahapan memahami informasi, merencana dan melaksanakan penyelesaian walaupun masih terdapat kesalahan operasi hitung (3) siswa dengan tingkatan tinggi juga sama siswa tingkatan sedang, yang mana siswa sudah sampai ke pada tahap menyelesaikan masalah dengan benar tetapi tidak melakukan pengecekan ulang terhadap solusi yang ditemukan.
Kata Kunci: Kemampuan pemecahan masalah matematis; Tingkat hasil belajar; Barisan dan deret.

Abstract

Learning serves as a forum for students' self-development before becoming part of society. Mathematical problem-solving ability is one of the important skills for students in solving challenges in the 21st century. This study aims to analyze students' problem-solving abilities based on the level of student learning outcomes. This type of research is qualitative with a descriptive approach. The research participant was 6 senior high school students from grade 11. Data were obtained in the odd semester of the 2022/2023 academic year. Data collection techniques were tests and interviews. The result showed that: First, low-level students are only able to pass understanding the information stage. Second, medium-level students can understand information, plan, and carry out solutions even though there are arithmetical errors. High-level students are also the same as medium-level students, where students have reached the stage of solving the problem correctly but did not re-check the final solutions
Keywords: Mathematical problem solving; Learning outcome level; Sequence and series.

I. INTRODUCTION

Mathematics serves as a training ground for the brain to think. A skilled mind can help solve many issues. Daily issues continue to develop along with the uncertain world situation and conditions from an economic and political perspective (Taufiq & Basuki, 2022). Students who study mathematics in good order can solve problem systematically and correctly. Learning mathematics can help students think critically and creatively and develop other mathematical abilities (NCTM, 2000; Sumarmo et al., 2012; Utami & Puspitasari, 2022).

There are various students' mathematical abilities according to their cognitive level (Kusnadi & Mardiani, 2022). One of them is problem-solving ability. Problem-solving ability is one of the objectives of learning mathematics (Syahruddin et al., 2021; Ratna & Yahya, 2022). This ability is also a measure of student success in learning mathematics. Therefore, student need to develop problem-solving skills. Problem-solving ability should always be integrated into learning mathematics through solving non-routine math problems (Harahap, 2022). Thus, when students face real life problem, they will get used to applying the problem-solving procedures they learn when solving math problems (Aeni & Afriansyah, 2022).

The results of interviews with one of high school mathematics teacher show that student's problem-solving skills are still relatively low. The results of the initial study show: (1) Students have a passive role in the learning process, so students mostly memorize formulas and imitate the completion steps of the questions given to students, (2) When they are asked to solve non-routine questions, they find it difficult to solve them, (3) Students still feel confused in choosing and determining the correct formula to solve the problem. This indicates the students' difficulties in solving mathematical problems.

According to Utami and Wutsqa (2017), and also Disparrilla and Afriansyah (2022), students lacked problem-solving skills. This is shown by (1) students did not understand the problem, (2) students could not make mathematical models, and (3) students were not careful in performing calculations. Another research finding also confirmed that students' mathematical problem-solving abilities are still relatively low, which is below 50% (Agustami et al., 2021; Pirmanto et al., 2020)

The inability of students to solve this problem is a concern for research. Sequence and series material is high school material with various non-routine questions (Damayanti & Kartini, 2022). There are still many students who have not been able to solve questions if the questions given by the teacher vary from the examples given previously (Andayani & Lathifah, 2019; Minggi, I., Arwadi, F., & Bakri, 2022). Therefore, this study aims to analyze the mathematical problem-solving ability of high school students who have level of learning outcomes on a specific topic, sequence and series. This research examines it from a different perspective. Previous research tried to analyze problem-solving skills by obtaining presentations from each indicator. Meanwhile, this study looks at the extent to which students' problem-solving stages are based on high, medium, or low learning outcomes. This

p-ISSN: 2086-4280
e-ISSN: 2527-8827

research is expected to be a reference in designing a learning, especially as an effort to improve students' mathematical problem-solving abilities.

II. METHOD

This study aims to describe the problem-solving ability of high school students' sequence and series topic. Thus, the researcher chose the qualitative descriptive research because it was considered appropriate to answer the research question. Data was obtained in the odd semester of the 2022/2023 academic year. The participants of this study were selected from grade 11 Senior High School, total 26 people. Then these students are being classified based on their learning outcomes, namely high, medium and low. Furthermore, 2 students were chosen to represent each level of learning outcomes. So total participant in this study is to 6 students.

Data collection techniques are tests and interviews. The mathematical problem-solving ability test consists of 2 questions, as shown in Table 1. The interview was conducted in a semi-structured style after the test was given to the students.

Table 1.
Test Item of Mathematical Problem-Solving Ability

No.	Question Items
1.	Mr. Tono managed to pick 12,300 mangoes in 30 days. If the number of mangoes he can pick each day form an arithmetic sequence, and on the first day he only picks 20 mangoes, how many mangoes did Pak Tono pick on the last day?
2.	Andin's, Bimo's, and Citra's ages form a geometric sequence, respectively. The sum of their ages is 14 years. The comparison between Bimo and Citra's age is 2:1. How old will Bimo be 5 years from now?

The data were analyzed descriptively according to the four stages of problem-solving. There are four stages, namely (1) understanding the problem, (2) planning the solution, (3) implementing the solution, and (4) reviewing the solution. The description of each stage based on (Polya, 1973) can be seen in Table 2. Students are said to have good solving abilities when students can go through the four stages of problem-solving.

Table 2.
Stages of Problem Solving

No	Stages	Learning Outcome rate
1	Understanding the problem	Acknowledge what is known and asked in the problem; explain the problem in their own words.
2	Planning the solution	Simplify the problem; able to make experiments and simulations; able to search for sub-goals; and sort information.
3	Implementing the solution	Interpreting the provided problem in the form of a mathematical sentence; implement the strategy during the process and calculation takes place
4	Reviewing the solution	Check all the information and calculations involved; consider whether the solution is logical; look at other alternative solutions; read the question back, and ask yourself if the question has been answered.

The procedures in this study are: (1) preparing instrument that is an essay problem-solving abilities and interview guideline (2) testing test questions so that a valid and reliable instrument is obtained (3) giving test questions to 26 students in class XI (4) summarizing and analyzing data. The data in this study are qualitative, so to make an analysis, it takes 3 stages, namely (1) data reduction; in this stage, the researcher checked the answers that the students had written, compose the transcripts of student interviews, and selected the main parts to be displayed and analyzed, (2) data display; in this stage, the researcher provides an overview of the answers that have been written by students, especially the six students who have been selected to represent each level of learning outcomes, and (3) conclusions; in this stage, the researcher provides an interpretation of the student's mathematical problem-solving abilities based on the level of learning outcomes.

III. Result and Discussion

The subjects were coded as in Table 3. Students with low levels of learning outcomes were coded as S1 and S2, then students with medium learning outcomes were coded as S3 and S4, and students with high learning outcomes were coded as S5 and S6.

Table 3.
Coding of Research Subjects

No	Subject Code	Learning Outcome Level
1	S1	Low
2	S2	Low
3	S3	Medium
4	S4	Medium
5	S5	High
6	S6	High

The first group is, students with low learning outcomes, consisted of S1 and S2. The answers of S1 for question 1 is presented in Figure 1.

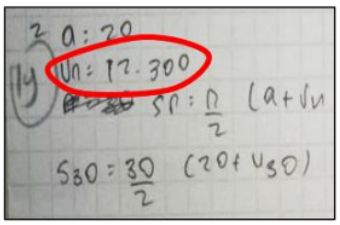

Figure 1. S1 Answers For Item 1

From Figure 1, it is noticeable that S1 gave wrong answer in formulating what is known from the question's narrative even though the final answer is correct. Here it appears that students do not understand the information provided. What should be known from the problem is the number of series (Sn), not the nth term (Un). From interview result, obtained information that S1 only guessing how to solve the problem by substituting the known numbers from the problem into the formula.

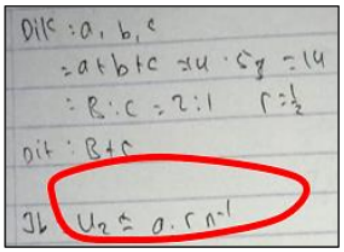

Figure 2. S2 Answers For Item 2

From Figure 2, it can be observed that S2 understand the information provided, Students can identify the information in the problem and turn into a correct mathematical model. Students S2 also understand the question by writing "B+5" based on the verbal. The student can

p-ISSN: 2086-4280
e-ISSN: 2527-8827

correctly symbolize statements about geometric ratios and the ratio of age in the test problem. However, student was not able to process the information, so they do not know how to solve the question. Supposedly if the student understands the information excellently, then the student will apply the steps to complete the answer by writing the geometric series formula (Sn) according to the acknowledged problem. At the same time, students only write the formula for the n^{th} term (Un). From interview, He said that he had no idea how to solve the problem, nor did he remember the formula which one to use.

According to the researcher, there are two occurring problems to S2 (low-ability students): (1) the student did not understand how to solve the question, and (2) The student did not remember the formula to solve the question. This finding similar to the results obtained by Rusyda et al. (2017) that low problem-solving ability may be caused by students' inability to recall the knowledge that they previously acquired. Students are also not accustomed to solving non-routine questions.

S1 and S2 revealed that they had never received such a question, so they did not understand the process of solving it. Research from Umrana et al. (2019) stated that students' kinesthetic-style solving ability also have similar indication; they are still at the stage of understanding the problem. This difficulty occurred because S1 does not master the material of sequences and series, so when the test items are modified, S1 and S2 students cannot continue solving the problem. Bernard et al. (2018) has found similar obstacles, such as students unable to carry out arithmetic operations, students not describe problems according to mathematical processes, students did not use formulas the right situation, and students were not able to understand pictures correctly.

S3 and S4 students are categorized into a group with medium learning outcomes. Item 1, selected from S3, can be seen in Figure 3.

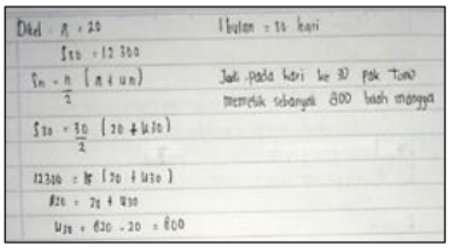

Figure 3. S3 Answers For Item 1

As sees in Figure 3, S3 identify the given information and write it in detail. Unfortunately, S3 did not mention what was asked in the question. In addition, S3 can understand information because S3 is quite excellent in explaining the variables of the problem. It is indicated from the way S3 can explain the first term and the 20th series correctly. S3 starts solving the problem with the general formula of an arithmetic series, and then S3 gets the 30th term. Then the S3 also use the correct formula so that the final result was correct. However, S3 did not re-check the answers obtained. The results of research conducted by Maryati & Fadhilah (2021) show that very few students re-examine the answers they obtained when solving problem.

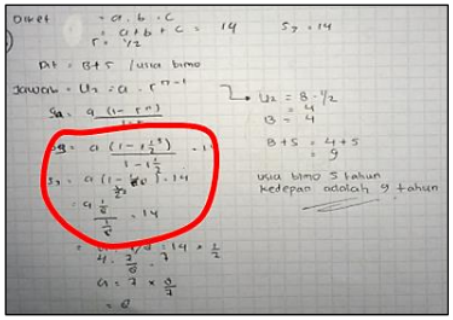

Figure 4. S4 Answers For Item 2

The answer of S4 for item 2 is presented in Figure 4. S4 has understood the information of the problem, planned how to solve the problem, and solved it. It is found that the student made an arithmetical error. and find answers to the questions. The researcher saw that these students were imitating the results of their friends' work as if forcing answers so that the results obtained were correct.

Based on the description about S3 and S4, it is inferred that these students can perform three stages of problem-solving, namely understanding the problem, planning, and carrying out the solution. Students with medium-learning outcomes are not accustomed to re-checking the final answers, so the final answers might not be proven true. Research from Hidayat & Sariningsih (2018) indicates that students with adversity quotient campers also experience the same thing as students with the intermediate learning level. For medium-group students can also be used with a generative learning model because students can be more active in learning and the subject matter is easier to remember, so problem-solving abilities can be fully mastered Mawaddah & Anisah (2015).

The last group is students with high learning outcomes, S5 and S6. For item 1, the researcher displays the answers of S5 students (see Figure 5).

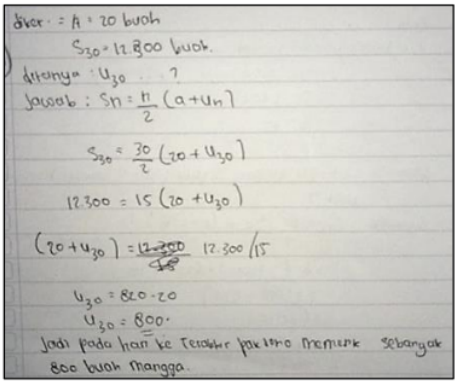

Figure 5. S5 Answers For Item 1

It is shown in Figure 5 that, S5 can understand the problem of this test well. The problem can be expressed in the form of mathematical symbols well, such as the first term of the arithmetic sequence and the 30th arithmetic series of picking mangoes. S5 can devise a plan to solve it and carrying it out appropriately. However, the S5 still did not check the final result.

Item 2 was chosen from the answers of S6 students and can be seen in Figure 6.

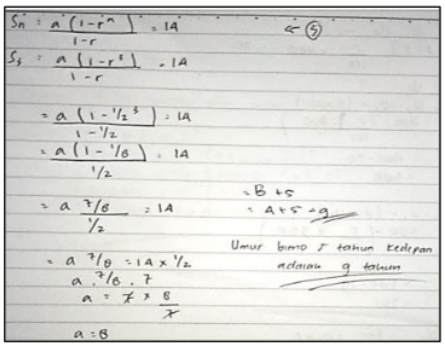

Figure 6. S6 Answers For Item 2

From Figure 6, S6 answered like students with medium abilities. It means that students can correctly state what is known, mention what is asked, and can solve the problem correctly, but did not re-

p-ISSN: 2086-4280
e-ISSN: 2527-8827

check the answers that have been obtained. S6 only concludes the final solution from the results of calculation. Research from Purnamasari & Setiawan (2019) has also shown similar results that students with high initial abilities can already master the three stages of problem-solving and did not get to the fourth stage, re-checking answers.

In addition, the researcher also interpreted that the students did not know the importance of re-checking the answers. Based on the results of interviews with S5 and S6, they are not accustomed to double-checking solutions because there is no such requirement during learning. The results of research by Jayanti et al., (2018) and Rambe & Afri (2020) showed that only a small proportion of students re-checked their answers. Whereas re-checking is an important step that must be passed by students so that the answers that have been obtained can be valid and can be justified.

Providing non-routine questions is one way to make students better find alternative answers so that students can complete mathematics tests convincingly (Amam, 2017). Hadi & Radiyatul (2014) added that students who have not mastered all stages of problem-solving skills are trained to work on tests with various alternative solutions so that students can understand the problem even though the variables are modified.

IV. Conclusion

Low-level students can only understand information. While, middle-level students can carry out the steps of understanding information, planning, and carrying out solutions even though there are still arithmetical errors. High-level students are also the same as medium-level students, where students have reached the stage of solving the problem correctly but did not re-check the solutions discovered.

From the results of this study, researchers provide suggestions (1) in designing mathematics learning, teachers should always provide problem-solving questions to students (2) teachers must also emphasize to their students the importance of answering questions using Polya stages.

Bibliography

Aeni, T. N., & Afriansyah, E. A. (2022). Kesalahan Siswa dalam Menyelesaikan Soal Cerita Sistem Persamaan Linear Dua Variabel berdasarkan Langkah Penyelesaian Polya. *Jurnal Kongruen*, *1*(3), 279-286.

Agustami, A., Aprida, V., & Pramita, A. (2021). Analisis Kemampuan Pemecahan Masalah Matematis Siswa Dalam Menyelesaikan Soal Materi Lingkaran. *Jurnal Prodi Pendidikan Matematika (JPPM)*, *3*(1).

Amam, A. (2017). Penilaian Kemampuan Pemecahan Masalah Matematis Siswa SMP. *Teorema: Teori dan Riset Matematika*, *2*(1). https://doi.org/10.25157/teorema.v2i1.765

Andayani, F., & Lathifah, A. N. (2019). Analisis Kemampuan Pemecahan Masalah Siswa SMP dalam Menyelesaikan Soal Pada Materi Aritmatika Sosial. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, *3*(1). https://doi.org/10.31004/cendekia.v3i1.78

Bernard, M., Nurmala, N., Mariam, S., & Rustyani, N. (2018). Analisis Kemampuan Pemecahan Masalah Matematis Siswa SMP Kelas IX Pada Materi Bangun Datar. *SJME (Supremum Journal of Mathematics Education)*, *2*(2). https://doi.org/10.35706/sjme.v2i2.1317

Damayanti, N., & Kartini, K. (2022). Analisis Kemampuan Pemecahan Masalah Matematis Siswa SMA pada Materi Barisan dan Deret Geometri. *Mosharafa: Jurnal Pendidikan Matematika*, *11*(1). https://doi.org/10.31980/mosharafa.v11i1.1162

Disparrilla, Y. N., & Afriansyah, E. A. (2022). Analisis kemampuan pemecahan masalah matematis dan self-efficacy siswa pada materi SPLDV. *SIGMA: Jurnal Pendidikan Matematika*, *14*(2), 148-161.

Hadi, S., & Radiyatul, R. (2014). Metode Pemecahan Masalah Menurut Polya untuk Mengembangkan Kemampuan Siswa dalam Pemecahan Masalah Matematis di Sekolah Menengah Pertama. *EDU-MAT: Jurnal Pendidikan Matematika*, *2*(1). https://doi.org/10.20527/edumat.v2i1.603

Harahap, R. (2022). Analisis Kemampuan Pemecahan Masalah Soal Rutin dan Non-Rutin pada Mata Kuliah Kapita Selekta Matematika Sekolah. *Edukatif : Jurnal Ilmu Pendidikan*, *4*(3). https://doi.org/10.31004/edukatif.v4i3.2602

Hidayat, W., & Sariningsih, R. (2018). Kemampuan Pemecahan Masalah Matematis dan Adversity Quotient Siswa SMP Melalui Pembelajaran Open Ended. *JNPM (Jurnal Nasional Pendidikan Matematika)*, *2*(1). https://doi.org/10.33603/jnpm.v2i1.1027

Istigosah, H., & Noordyana, M. A. (2022). Kemampuan pemecahan masalah matematis ditinjau gaya kognitif siswa pada materi sistem persamaan linear dua variabel. *Jurnal Inovasi Pembelajaran Matematika: PowerMathEdu*, *1*(2), 149-160. https://doi.org/10.31980/powermathedu.v1i2.2227

Jayanti, M. D., Irawan, E. B., & Irawati, S. (2018). Kemampuan Pemecahan Masalah Kontekstual Siswa SMA pada Materi Barisan dan Deret. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, *3*(5). https://doi.org/10.17977/jptpp.v3i5.11092

Kusnadi, R. M., & Mardiani, D. (2022). Kemampuan pemecahan masalah matematis siswa sekolah menengah pertama negeri 3 tarogong kidul dalam masalah statistika. *Jurnal Inovasi Pembelajaran Matematika: PowerMathEdu*, *1*(2), 173-182. https://doi.org/10.31980/powermathedu.v1i2.2229

Maryati, I., & Fadhilah, D. N. (2021). Sequence and Series: An Analysis of Mathematical Problem Solving Ability. *IndoMath: Indonesia Mathematics Education*, *4*(2). https://doi.org/10.30738/indomath.v4i2.3

Mawaddah, S., & Anisah, H. (2015). Kemampuan Pemecahan Masalah Matematis Siswa pada Pembelajaran Matematika dengan Menggunakan Model Pembelajaran Generatif (Generative Learning) di SMP. *EDU-MAT: Jurnal Pendidikan Matematika*, *3*(2). https://doi.org/10.20527/edumat.v3i2.644

Minggi, I., Arwadi, F., & Bakri, R. A. I. (2022). Kemampuan Pemecahan Masalah Matematis Berdasarkan Disposisi Matematis pada Materi

Sistem Persamaan Linear Dua Variabel. *Plusminus: Jurnal Pendidikan Matematika*, *2*(3), 495-508. https://doi.org/10.31980/plusminus.v2i3.2170

Pirmanto, Y., Anwar, M. F., & Bernard, M. (2020). Analisis Kesulitan Siswa Sma Dalam Menyelesaikan Soal Pemecahan Masalah Pada Materi Barisan Dan Deret Dengan Langkah-Langkah Menurut Polya. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, *3*(4). https://doi.org/10.22460/jpmi.v3i4.p%p

Polya. (1973). *How to Solve It: A New Aspect of Mathematical Method.* Princeton University Press.

Purnamasari, I., & Setiawan, W. (2019). Analisis Kemampuan Pemecahan Masalah Matematis Siswa SMP pada Materi SPLDV Ditinjau dari Kemampuan Awal Matematika. *Journal of Medives : Journal of Mathematics Education IKIP Veteran Semarang*, *3*(2). https://doi.org/10.31331/medivesveteran.v3i2.771

Rambe, A. Y. F., & Afri, L. D. (2020). Analisis Kemampuan Pemecahan Masalah Matematis Siswa Dalam Menyelesaikan Soal Materi Barisan Dan Deret. *AXIOM : Jurnal Pendidikan dan Matematika*, *9*(2). https://doi.org/10.30821/axiom.v9i2.8069

Ratna, R., & Yahya, A. (2022). Kecemasan Matematika terhadap Kemampuan Pemecahan Masalah Matematika Siswa Kelas XI. *Plusminus: Jurnal Pendidikan Matematika*, *2*(3), 471-482. https://doi.org/10.31980/plusminus.v2i3.1908

Sumarmo, U., Hidayat, W., Zukarnaen, R., Hamidah, H., & Sariningsih, R. (2012). Kemampuan Dan Disposisi Berpikir Logis, Kritis, Dan Kreatif Matematik. *Jurnal Pengajaran MIPA*, *17*(1). https://doi.org/10.18269/jpmipa.v17i1.36048

Syahruddin, W., Abdullah, I. H., & Angkotasan, N. (2021). Analisis Kemampuan Pemecahan Masalah Matematis Siswa pada Materi Barisan dan Deret. *Jurnal Pendidikan Guru Matematika*, *1*(3).

Taufiq, D. A., & Basuki, B. (2022). Kemampuan Pemecahan Masalah Matematis Siswa SMP pada Materi Sistem Persamaan Linear Dua Variabel. *Plusminus: Jurnal Pendidikan Matematika*, *2*(2), 303-314. https://doi.org/10.31980/plusminus.v2i2.1814

Umrana, U., Cahyono, E., & Sudia, M. (2019). Analisis Kemampuan Pemecahan Masalah Matematis Ditinjau dari Gaya Belajar Siswa. *Jurnal Pembelajaran Berpikir Matematika (Journal of Mathematics Thinking Learning)*, *4*(1). https://doi.org/10.33772/jpbm.v4i1.7102

Utami, R. W., & Wutsqa, D. U. (2017). Analisis kemampuan pemecahan masalah matematika dan self-efficacy siswa SMP negeri di Kabupaten Ciamis. *Jurnal Riset Pendidikan Matematika*, *4*(2). https://doi.org/10.21831/jrpm.v4i2.14897

Utami, H. S., & Puspitasari, N. (2022). Kemampuan pemecahan masalah siswa smp dalam menyelesaikan soal cerita pada materi persamaan kuadrat. *Jurnal Inovasi Pembelajaran Matematika: PowerMathEdu*, *1*(1), 57-68. https://doi.org/10.31980/powermathedu.v1i1.1916

AUTHORS' BIOGRAPHY

Dr. Risnawati, M.Pd.

The author is a postgraduate lecturer at UIN Suska Riau. His educational background started from studying D3 majoring in Mathematics Education at IAIN Suska Riau then completing his Bachelor degree majoring in Islamic Religious Education at IAIN Suska Riau. He continued his master's degree majoring in Mathematics Education at UPI Bandung and his last education was a Doctoral degree majoring in Education, Padang State University.

Mayu Syahwela, M.Pd.

Graduated with a bachelor's degree in mathematics education at UIN Suska Riau in 2013 and a master's degree in mathematics education at UPI Bandung in 2017. Currently active as a teacher at UIN Suska Riau from 2019 until now.

Dr. Zubaidah Amir MZ., M.Pd.

The author is a permanent lecturer at the Department of Mathematics Education at UIN Suska Riau. Has completed his doctoral degree majoring in Mathematics Education at UPI Bandung in 2016.

Students' Mathematical Problem-Solving Ability Based on The Level of Learning Outcomes on Sequence and Series

ORIGINALITY REPORT

1%	%	%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Academic Library Consortium Student Paper	<1%
2	Submitted to Pasundan University Student Paper	<1%
3	Submitted to Universitas Muria Kudus Student Paper	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		