

## REFERENCES

- Andini, S. F., & Marlina, R. (2021). Analisis kemampuan komunikasi matematis siswa SMP dalam menyelesaikan soal pada materi himpunan. *Jurnal Pembelajaran Matematika Inovatif*, 4(2), 343–354.  
<https://doi.org/10.22460/jpmi.v4i2.343-354>
- Aryanti. (2020). *Inovasi pembelajaran matematika di SD (problem based learning berbasis Scaffolding, pemodelan dan komunikasi matematis)*. Deepublish Publisher.
- Aurelyasari, S., & Nur, I. R. D. (2023). Analisis kemampuan komunikasi matematis siswa SMP pada materi aljabar. *Radian Journal: Research and Review in Mathematics Education*, 1(3), 127–134.  
<https://doi.org/10.35706/rjrrme.v1i3.7153>
- Balitbang Kemdikbud. (2019). *Indonesia pada PISA 2018*. 1–15.  
file:///C:/Users/PC/Downloads/Kemendikbud\_PISA\_2018\_2019-12-03.pdf
- Baroody, A. J. (1993). *Problem solving: Reasoning, and communicating K-8 helping children think mathematically*. Macmillan Publishing Company.
- Camenisch, J., & Lehmann, A. (2017). Privacy-preserving user-auditable pseudonym systems. *Proceedings - 2nd IEEE European Symposium on Security and Privacy, EuroS and P 2017, April*, 269–284.  
<https://doi.org/10.1109/EuroSP.2017.36>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? research case examples. *Journal of Research in Nursing*, 25(8), 652–

661. <https://doi.org/10.1177/1744987120927206>
- Căprioară, D. (2015). Problem solving - purpose and means of learning mathematics in school. *Procedia - Social and Behavioral Sciences*, 191, 1859–1864. <https://doi.org/10.1016/j.sbspro.2015.04.332>
- Chasanah, C., Riyadi, & Usodo, B. (2019). Analysis of written mathematical communication skills of elementary school students. 397(21), 648–656.  
<https://doi.org/10.2991/assehr.k.200129.082>
- Chasanah, C., Riyadi, & Usodo, B. (2020). The effectiveness of learning models on written mathematical communication skills viewed from students' cognitive styles. *European Journal of Educational Research*, 9(3), 979–994.  
<https://doi.org/10.12973/EU-JER.9.3.979>
- Dila, O. R., & Zanthy, L. S. (2020). Identifikasi kesulitan siswa dalam menyelesaikan soal aritmatika sosial. *Teorema: Teori Dan Riset Matematika*, 5(1), 17. <https://doi.org/10.25157/teorema.v5i1.3036>
- Faelasofi, R., Arnidha, Y., & Istiani, A. (2015). Metode pembelajaran mind mapping untuk meningkatkan kemampuan komunikasi matematik siswa dalam pemecahan masalah matematika. *JURNAL E-DuMath*, 1(2), 122–136.  
[ejournal.umpri.ac.id/index.php/edumath/article/view/116](http://ejournal.umpri.ac.id/index.php/edumath/article/view/116)
- Hafifah, D. N., & Bharata, H. (2018). The importance of mathematical communication skills for students in mathematics learning. *3rd SHIELD International Conference*, 1, 125–130. <https://shield.unila.ac.id/2018/wp-content/uploads/2019/05/Edu.7.-Diah-Nur-Hafifah.pdf>
- Hasanah, S. I., Tafrilyanto, C. F., & Aini, Y. (2019). Mathematical reasoning: the

- characteristics of students' mathematical abilities in problem solving.
- Journal of Physics: Conference Series*, 1188(1).
- <https://doi.org/10.1088/1742-6596/1188/1/012057>
- Kassa, B. G., Ding, L., & Tamiru, A. B. (2023). Describing and interpreting the space of classroom learning in problem-solving-based mathematics instruction: Variation as an analytical lens. *Education Sciences*, 13(2).
- <https://doi.org/10.3390/educsci13020111>
- La’ia, H. T., & Harefa, D. (2021). Hubungan kemampuan pemecahan masalah matematis dengan kemampuan komunikasi matematik siswa. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 7(2), 463.
- <https://doi.org/10.37905/aksara.7.2.463-474.2021>
- Martin, C. S., Polly, D., & Kissel, B. (2016). Exploring the impact of written reflections on learning in the elementary mathematics classroom. *Journal of Educational Research*, 110(5), 538–553.
- <https://doi.org/10.1080/00220671.2016.1149793>
- Martins, L. G., & Martinho, M. H. (2021). Strategies, difficulties, and written communication in solving a mathematical problem. *Bolema - Mathematics Education Bulletin*, 35(70), 903–936. <https://doi.org/10.1590/1980-4415v35n70a16>
- Martyaningrum, I. D., & Prabawanto, S. (2020). Analysis of students' mathematical reflective thinking skills and habits of mind. *Journal of Physics: Conference Series*, 1521(3). <https://doi.org/10.1088/1742-6596/1521/3/032060>

- Melisari, M., Septihani, A., Chronika, A., Permanganti, B., Jumiati, Y., & Fitriani, N. (2020). Analisis kesalahan siswa dalam menyelesaikan soal pemahaman konsep matematika sekolah dasar pada materi bangun datar. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 4(1), 172–182.  
<https://doi.org/10.31004/cendekia.v4i1.182>
- Miles, M. B., Hubermann, M. A., & Sald. (2014). *Qualitative data analysis* (3.ed). SAGE Publications, Inc.
- Misni, M., & Ferdianto, F. (2019). Analisis kesalahan dalam menyelesaikan soal geometri siswa kelas XI SMK Bina Warga Lemahabang. *Jurnal Fourier*, 8(2), 73–78. <https://doi.org/10.14421/fourier.2019.82.73-78>
- Moschkovich, J. N. (2018). Recommendations for research on language and learning mathematics. [https://doi.org/10.1007/978-3-319-75055-2\\_4](https://doi.org/10.1007/978-3-319-75055-2_4)
- NCTM. (2000). *Principles and standards for school mathematics*. In *Nucl. Phys.* (Vol. 13, Issue 1).
- Pantaleon, K. V., Juniati, D., & Lukito, A. (2018). The oral mathematical communication profile of prospective mathematics teacher in mathematics proving. *Journal of Physics: Conference Series*, 1108(1).  
<https://doi.org/10.1088/1742-6596/1108/1/012008>
- Peng, P., & Kievit, R. A. (2020). The development of academic achievement and cognitive abilities: A bidirectional perspective. *Child Development Perspectives*, 14(1), 15–20. <https://doi.org/10.1111/cdep.12352>
- Polya, G., & Conway, J. H. (2004). *How to solve it* (2.ed). Princeton University Press.

- Powell, S. R., & Hebert, M. (2016). Influence of writing ability and computation skill on mathematics writing. <https://digitalcommons.unl.edu/specedfacpub>
- Pradipta, D. A. (2018). Pengaruh minat belajar dan komunikasi matematis terhadap pemahaman konsep matematika. *EKUIVALEN - Pendidikan Matematika*, 31(1), 66–71.  
<http://ejurnal.umpwr.ac.id/index.php/ekuivalen/article/view/4356>
- Purnomo, P. (2017). The implementation of school-based lesson study at elementary school. *Jurnal Prima Edukasia*, 5(2), 160–171.  
<https://doi.org/10.21831/jpe.v5i2.14284>
- Riyadi, S., Noviartati, K., & Abidin, Z. (2021). Kemampuan komunikasi matematis tulis siswa Samin dalam memecahkan masalah geometri. *Ethnomathematics Journal*, 2(1), 31–37.  
<https://doi.org/10.21831/ej.v2i1.36192>
- Rohid, N., Suryaman, Retno, & Rusmawati, D. (2019). Students' mathematical communication skills (MCS) in solving mathematics problems: A case in Indonesian context. *Anatolian Journal of Education*, 4(2), 19–30.
- Simamora, R. E., Saragih, S., & Hasratuddin, H. (2018). Improving students' mathematical problem solving ability and self-efficacy through guided discovery learning in local culture context. *International Electronic Journal of Mathematics Education*, 14(1), 61–72.  
<https://doi.org/10.12973/iejme/3966>
- Solfitri, T., & Roza, Y. (2015). Analisis kesalahan dalam menyelesaikan soal-soal geometri siswa kelas IX SMPN se-Kecamatan Tampan Pekanbaru.

*Prosiding Semirata 2015 Bidang MIPA BKS-PTN Barat Universitas*

*Tanjungpura Pontianak, 295–303.*

Sumarmo, U. (2012). *Pendidikan karakter serta pengembangan berfikir dan disposisi matematik dalam pembelajaran matematika. Seminar Pendidikan Matematika*, pp.1-26.

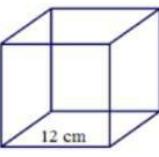
Tiffany, F., Surya, E., Panjaitan, A., & Syahputra, E. (2017). Analysis mathematical communication skills student at the grade IX junior high school. 9.(2)

Videnovic, M. (2017). Oral vs. written exams: What are we assessing in mathematics? *Imvi - Open Mathematical Education Notes*, 7(1), 1–7.

<https://doi.org/10.7251/OMEN1701001V>

## APPENDICES

### Appendices 1. Attachments of mathematics test

MATEMATIKA KUIS		
Mata pelajaran Tema/Topik Nama Kelas Tanggal	: Matematika : Kubus dan Balok : _____ : V _____ No.: _____ :	TTD Guru Skor
<p><b>Jawablah pertanyaan-pertanyaan berikut ini dengan benar!</b></p> <p>1. Ani memiliki kotak pensil yang mempunyai panjang 20 cm, lebar 6 cm, dan tinggi 4 cm.</p> <p>a. Bentuk dari kotak pensil Ani merupakan _____. Mengapa kotak pensil Ani disebut berbentuk seperti yang kamu tuliskan? _____ _____</p> <p>b. Berapakah muatan atau volume yang dapat masuk ke dalam kotak pensil Ani?</p> <p><b>Soal 1B</b> Diketahui: Ditanya: Jawaban:</p> <p>2. Salah satu rusuk dari gambar dibawah adalah 12 cm. Hitunglah luas dan volume bangun ruang tersebut!</p> <p></p> <p><b>Soal 2</b> Diketahui: Ditanya: Jawaban:</p> <p>3. Fajar ingin menggambar sebuah balok dengan catatan ukuran lebar balok tersebut lebih besar dari pada tinggi baloknya dan ukuran Panjang lebih besar daripada ukuran lebarnya. Gambarlah sebuah balok dengan letak panjang, lebar dan tinggi balok seperti yang akan fajar gambarkan.</p> <p><b>Soal 3</b> Jawaban:</p>		

## **Appendices 2. Class Documentation**

