

ENGLISH FOR MATHEMATICS

Midterm Exam

Part A – Reading

1 Mathematics is one of the subjects that has an important role in education (Eviyanti, *et al.*
2017; Muhtadi, *et al.* 2017). Mathematics takes the role as a tool to organize our daily lives in
society (Risdiyanti & Prahmana, 2018). We use Mathematics as a tool in many jobs and also in
5 making calculated decisions (Ali, 2013). The ability to solve mathematical problems is very
important. Many efforts have been implemented intensively and sustainably by the Indonesian
government to improve education (Darma, 2018). Therefore, mathematical problem solving is
the necessary ability for students and becomes important to learn.

The Regulation of the Indonesian Ministry of Education and Culture Number 22 of 2006
concerning the Content Standard for Primary and Secondary Education states that Mathematics
10 learning is provided to promote learners using logical, analytical, systematic, critical, and
creative thinking ability as well as the ability to work together. Thus, the learners can have the
ability to obtain, manage, and utilize the information to survive in a situation that always
changes, uncertain, and competitive (Ahamad, *et al.* 2018). The achievement of those
competencies is in the form of increased knowledge, skills, and attitude development through
15 the learning process.

Based on the regulation, problem-solving is a focus on Mathematics learning. In increasing
the problem-solving ability, students need to develop several skills, namely the skill to
comprehend the problem, creating Mathematical models, solving the problems, and interpreting
the Solutions (Widodo, *et al.* 2019). In any chances, Mathematical learning should begin with the
20 introduction of problems that are appropriate to the students' real situation (contextual
problem).

NCTM (2000) asserts the importance of mathematical problem-solving, which states that
problem-solving is an integral part of Mathematics learning. Therefore, it should not be
separated from mathematics learning. Also, problem-solving skills are the goals of mathematics
25 learning. Mathematical problems are tools that are used not only to help the students develop
their thinking skills but also help them to develop their basic skills in solving problems, especially
problems in their daily life (Pimta, Tayraukham, & Nuangchalerm, 2009; Muhtadi, *et al.* 2017;
Shahrill, *et al.* 2018).

Based on the research of PISA (Program for International Student Assessment) in 2015,
30 Indonesia is ranked 62 out of 70 countries participating in PISA (OECD, 2018). The average score
of mathematics achievement of all countries is 490; meanwhile, the average score of
mathematics students in Indonesia is 386. Based on that description, Indonesia's ranking is still
far below the international average. It means that the mathematics ability of Indonesian students
is still low. Because of that reason, the mathematics learning process in elementary schools needs
35 improvement. Mathematics learning should be designed according to the goals that are listed in
the curriculum.

Reading Comprehension Questions

Answer the following questions based on the passage!

1. Which regulation states that Mathematics learning is provided to promote learners using logical, analytical, systematic, critical, and creative thinking ability as well as the ability to work together?

Answer:

2. What is the average score of mathematics students in Indonesia?

Answer:

3. Indonesia's ranking is still far below the international average. What does it mean?

Answer:

4. According to Risdiyanti and Prahmana, what is the role of Mathematics?

Answer:

5. Why does the mathematics learning process in elementary schools need improvement?

Answer:

Part B – Structures

B.1. Simple Present & Present Progressive Tenses

Change the words in the brackets using the correct form of simple present/ present progressive!

In Mr. Hadi's math class, students usually _____ (work) on solving real-world problems. Every Monday, Mr. Hadi _____ (give) them a new project to complete during the week. Right now, the students _____ (discuss) different strategies to solve a geometry puzzle. Some of them _____ (use) online tools, while others _____ (draw) their solutions on paper.

B.2. Present Perfect Tense, Simple Past Tense, and Past Perfect Tense

Change the words in the brackets using the correct form of present perfect tense/ simple past/ past perfect tense! You can find the verb categories in the following table to help you.

Last semester, our school _____ (organize) a special workshop for students who love mathematics. Before the event _____ (begin), the teachers _____ (prepare) many interesting activities and materials. Since then, many students _____ (show) more interest in math competitions. Last week, one of our students _____ (win) a national math contest for the first time!

base form (v1)	past verb (v2)	past participle (v3)
organize	organized	organized
begin	began	begun
prepare	prepared	prepared
show	showed	showed
win	won	won

B.3. Instructions, Suggestions, and Advices

For no. 1-3, choose the best suggestion/ advice to the problem.

1. **Problem:** "I don't understand Calculus."
What is the best suggestion?
 - a. You had better join tutorial classes.
 - b. You must forget it.
 - c. You are stupid!
 - d. Me too!

2. **Problem:** "I forgot my SIAKAD password."
What should the person do?
 - a. You should rest.
 - b. You must see your advisor.
 - c. You must forget it.
 - d. You must remember it.

3. **Problem:** "My children spend too much time on their cell phones."
What should the person do?
 - a. You must sell the cell phones.
 - b. You should take them to outdoor activities.
 - c. You have to take them to the police.
 - d. You had better report them to school.

For no. 4-5, choose the most appropriate direction/ instruction to complete the blanks.

4. Student : "I would like to consult my project."
Teacher : "Of course! ..."
 - a. I don't care
 - b. So?
 - c. Sending it.
 - d. Send it to my email.

5. Staff : "There's a little problem with the admission process. Can I talk to you about it?"
Manager : "Yes, ..."
 - a. Bring the files!
 - b. Open the window!
 - c. Come in, please.
 - d. Sleep now!

Part C – Pronouns

What do the bolded words refer to? What do the bolded words refer to? Write down your answer in the table.

The Math Club at Greenwood High has grown quickly over the last year. **It** started with just five students, but now more than twenty students attend the weekly meetings. **They** meet every Friday to solve puzzles, compete in math games, and prepare for competitions.

Mr. Yusuf is their teacher. **He** helps the students find interesting challenges and guides them through tough problems. "This club is special because the students really enjoy working together," says Mr. Yusuf. "**Their** teamwork and creativity make a big difference."

Last month, the club joined a regional math competition. **It** was held at a university in the city. The students were nervous, but **they** did very well. In fact, the team won second place!

After the event, the club members shared **their** experiences with other students at school. Some students were so inspired that **they** decided to join the club too. The Math Club is proud of **its** achievements, and **the students** are already preparing for the next challenge.

No.	Answer
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	