THE RELATIONSHIP BETWEEN USE OF LEARNING FACILITIES AT HOME, INDEPENDENT LEARNING, AND DISCIPLINE LEARNING WITH MATHEMATICS LEARNING OUTCOME

Endah Kusuma Dewi^a, Uswatun Khasanah^b

Program Studi Pendidikan Matematika Universitas Ahmad Dahlan Jalan Ring Road Selatan, Tamanan, Banguntapan, Bantul Yogyakarta ^aeen_mlng@yahoo.com, ^buswatun.khasanah@pmat.uad.ac.id

ABSTRACT

The poor student learning outcomes associated with many factors. The use of learning facilities, independent learning, and discipline of learning are some of the factors that were related to the learning outcomes. This study aims to determine the presence or absence of a positive and significant relationship between the use of learning facilities, independent learning, and discipline of learning with mathematics learning outcomes in class VIII of even semester at Junior High School (SMP) Muhammadiyah 1 Sewon Bantul academic year 2016/2017. This research population is in a class of even semester at SMP Muhammadiyah 1 Sewon Bantul academic year 2016/2017, consisting of two classes with 53 students. The samples were taken with a random sampling technique to the classroom and derived class VIII B as a sample class with 27 students. The data collection technique used the questionnaire technique and test. Test instrument used validity test and reliability test. Test requirement analysis used a normality test, linearity test, and independence test. Analysis of data to test hypotheses used linear regression and correlation analysis. The result showed that there is a positive and significant relationship between used of learning facilities, independent learning, and discipline of learning with mathematics learning outcomes, obtained $F_{count} = 10,50895148 > F_{table} = 3,03$, multiple correlation coefficient of (R) = 0,76038772683, regression equation \hat{Y} = -128,0849716 + 0,2376796668 X₁ + 0,6374109258 X₂ + 0,9547188982 X₃, the relative contribution X₁ = 17,37668376%, X₂ = 33,77592505%, dan $X_3 = 48,8473912\%$, and the effective contribution of $X_1 = 10,16775925\%$, $X_2 = 10,16775925\%$ 19,7635797%, dan $X_3 = 28,58246836\%$.

Keywords: learning facilities, independent learning, the discipline of learning, mathematics learning outcomes

INTRODUCTION

Development in education is an effort to educate the nation's life and improve human quality. According to Uno, Hamzah B. (2012: 129), mathematics is a field of science that is a tool of thought, communication, a tool to solve various practical problems, the elements of which are logic and intuition, analysis and construction, generality and individuality, and have branches include arithmetic, algebra, geometry, and analysis.

Mathematics is a science branch that examines mindset and relationships and logical evidence with a comprehensive range of useful objects. According to Hamzah B. Uno (2012: 139) Student learning outcomes in mathematics result from learning mathematics in the form of knowledge resulting from students' treatment or learning. Or in other words, student learning outcomes in mathematics are what students get from learning mathematics. According to Arikunto (2009: 274): Learning facilities are essential to be fulfilled because they have functions that can affect learning outcomes. Students who are studying besides having good learning facilities must also have independence. According to Miarso in Eti Nurhayati (2011: 141), learning independence is the arrangement of learning programs organized so that each learner can choose or determine his learning materials and progress.

Students who have disciplined learning are: active, obedient, and obedient in entering school, active in doing assignments, regular and diligent in learning at school and obeying school rules. Discipline comes from the root word of discipline, which gets a prefix and a suffix. In the Indonesian dictionary, discipline means obedience and obedience to rules, rules, and so on. Meanwhile, according

to the Indonesian National Resilience Institute cited by Setyaningrum (2012), discipline is compliance to respect and implement a system that requires people to comply with decisions, orders, or regulations in force. According to the Ministry of National Education (in the Big Indonesian Dictionary, 2008: 486), result means something that is held (made, made). While the word learning has many meanings, learning is a conscious change process according to the previous understanding. It is continuous both in terms of behavior or knowledge that has a purpose due to interaction with the environment.

Based on interviews with five students and three students, they said they did not have complete facilities for home study activities, such as stationery, study rooms, study lamps, and other supporting facilities at home. Learning facilities help achieve optimal learning outcomes supported by teacher's and parents' roles and responsibilities. Parents also play a role and are responsible for their children's education. For this reason, parents are required to provide all the facilities needed to support the achievement of maximum learning outcomes. Parental involvement is always required to implement children's learning processes, especially when they are at home. Economic limitations of parents often make students do not have adequate learning facilities. For example, there are no textbooks, other supporting books, school stationery, and so on.

Student learning outcomes also depend on individuals who study. The reality shows that each student's learning outcomes are different, depending on the understanding of the individual who is learning and the independence of learning in students. Learning independence is one of the factors that influence the learning outcomes of mathematics. This is understood because learning activities are the responsibility of students themselves.

Based on interviews with teachers, he said that student independence was still low. Discipline is a critical element in the learning process both before, during, and after the class's learning process. However, in reality, what was found in SMP Muhammadiyah 1 Sewon, the level of student discipline was still low. This means that these students' learning discipline is still low because students who are disciplined in learning can direct themselves and control their behavior to show discipline in programmatic learning activities.

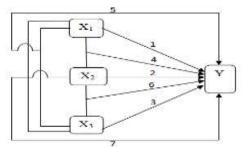
Based on the background and boundaries of the problem, it can be formulated the problem to be investigated, is there a positive and significant relationship between learning facilities at home, learning independence, and learning discipline with mathematics learning outcomes in eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul in the 2016/2017 school year?

This research aims to determine whether there is a positive and significant relationship between learning facilities at home and learning independence. Learning discipline with mathematics learning outcomes in eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul the 2016/2017 academic year.

METHODS

This research is classified as quantitative research. The research site was conducted at SMP Muhammadiyah 1 Sewon, Bantul. Simultaneously, the study's time was conducted in the even semester of the 2016/2017 school year. This study's population were all eighth-grade students of the even semester of SMP Muhammadiyah 1 Sewon Bantul consisting of 2 classes.

Random sampling techniques conducted sampling in this study to the class. Sampling is done by lottery class. The class taken as a sample class is class VIII B. Test the questionnaire instrument uses the validity test. In contrast, the test instrument questions use the instrument validity test with productmoment correlation techniques, different power tests, and instrument reliability tests with the KR-20 formula (Suharsimi Arikunto. 2013: 87).



Information : X₁: Home Learning Facilities X₂: Independence Learning X₃: Learning discipline Y: Mathematics learning outcomes

(Sugiyono,2005: 69)

This research was conducted at SMP Muhammadiyah 1 Sewon, Bantul Regency. This study's subjects were eighth-grade students of SMP Muhammadiyah 1 Sewon in Bantul Regency in the 2016/2017 school year. This research was conducted in the even semester of the 2016/2017 school year. This study's population were all eighth-grade students of SMP Muhammadiyah 1 Sewon in Bantul Regency in the even semester of the 2016/2017 school year. The classes were class VIII A and VIII B.

This study's independent variables are: Home Learning Facilities, Independence Learning, and Learning discipline. This study's dependent variable was the mathematics learning outcomes of the VIII grade students of SMP Muhammadiyah 1 Sewon Bantul in the 2016/2017 academic year (Y). Data collection techniques in this study were questionnaire (questionnaire) and test.

To find out the results of mathematics learning for eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Yogyakarta. The researcher will then give a test in multiple-choice questions to students with four alternative answers. A, b, c, or d with the correct answer score is one and for the wrong answer is 0. This test score is used as a student's ability to learn. The cognitive domains used for this test instrument are aspects of knowledge (C_1), understanding (C_2), and application (C_3). These questions concern material about the Circle. Based on the results of the validity test analysis with a significance level of 5%, it is known that of the 25 items of the mathematics learning achievement test given, there are seven invalid questions. The following summarizes the validity of the research instrument. The data analysis technique is 1) Test Analysis Prerequisites, and 2) Hypothesis Test

RESULTS AND DISCUSSION

Data on the utilization of learning facilities was obtained from the questionnaire score of using learning facilities. The lowest score was 78.

| | Tuble It Dealing Interest Frequency Distribution Data | | | | | | |
|-----------------|---|----------------|---------|-------------------------------|-------------|--|--|
| Class Intervals | f _i | x _i | x_i^2 | f _i x _i | $f_i x_i^2$ | | |
| 78-84 | 2 | 81 | 6561 | 162 | 13122 | | |
| 85-91 | 6 | 88 | 7744 | 528 | 46464 | | |
| 92-98 | 4 | 95 | 9025 | 380 | 36100 | | |
| 99-105 | 6 | 102 | 10404 | 612 | 62424 | | |
| 106-112 | 8 | 109 | 11881 | 872 | 95048 | | |
| 113-119 | 1 | 116 | 13456 | 116 | 13456 | | |
| Total | 27 | 591 | 59071 | 2670 | 266614 | | |

| Table 1 | Learning | Interest | Frequency | Distribution | Data |
|---------|----------|----------|-----------|---------------------|------|
| | Leanning | morest | ricquency | | Data |

From the data in Table 1, it was obtained, and the highest score was 115. The average price was 98.8888889, and the standard deviation was 9.962751139. To interpret the scores obtained, the students are grouped into three groups: good, moderate, and low.

The distribution of the number of categories of students in the utilization of learning facilities can be seen in Table 2 as in Table 2.

| Category | Score | f | Percentage (%) |
|----------|-----------------------------------|----|----------------|
| Good | <i>X</i> > 108,85164 | | 18,51851852 |
| Moderat | $88,92613775 \le X \le 108,85164$ | 15 | 55,5555556 |
| Less | <i>X</i> < 88,92613775 | 7 | 25,92592593 |
| | Amount | 27 | 100 |

Table 2. Distribution of Students by Category of Learning Facilities Utilization

From the results of the categorization, as shown in Table 2, it can be seen the utilization of learning facilities for students of class VIII of SMP Muhammadiyah 1 Sewon Bantul Regency even semester of the academic year 2016/2017

Learning independence data obtained from the learning independence questionnaire score obtained the lowest score of 81 and the highest score of 115.

| | Tuber 9. 1 requerely Distribution of Independent Learning | | | | | | |
|-----------------|---|----------------|----------|-----------|-------------|--|--|
| Class Intervals | f_i | x _i | x_i^2 | $f_i x_i$ | $f_i x_i^2$ | | |
| 77-82 | 1 | 79.5 | 6320.25 | 79.5 | 6320.25 | | |
| 83-88 | 1 | 85.5 | 7310.25 | 85.5 | 7310.25 | | |
| 89-94 | 5 | 91.5 | 8372.25 | 457.5 | 41861.25 | | |
| 95-100 | 10 | 97.5 | 9506.25 | 975 | 95062.5 | | |
| 101-106 | 6 | 103.5 | 10712.25 | 621 | 64273.5 | | |
| 107-112 | 4 | 109.5 | 11990.25 | 438 | 47961 | | |
| Total | 27 | 567 | 54211.5 | 2656.5 | 262788.75 | | |

Tabel 3. Frequency Distribution of Independent Learning

From the data in Table 3, the average price of 99.5 is obtained, and a standard deviation is 9.703290481.

To interpret the scores obtained, the students are grouped into three groups: good, moderate, and poor. Distribution of the number of student categories in learning independence can be seen in Table 4 as follows:

| Category | Score | f | Percentage (%) |
|----------|-------------------------------------|----|----------------|
| Good | <i>X</i> > 109,2032905 | 5 | 18,51851852 |
| Moderate | $89,79670952 \le X \le 109,2032905$ | 17 | 62,96296296 |
| Less | <i>X</i> < 89,79670952 | 5 | 18,51851852 |
| | Amount | 27 | 100 |

Table 4. Distribution of Students by Learning Independence Category

From the results of the categorization, as shown in Table 4, it can be seen the learning independence of the eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester of the academic year 2016/2017 included in the medium category because the frequency is mostly located at intervals of $89.79670952 \le X \le 109.2032905$ namely as many as 17 students or as much as 62,96296296%.

Learning discipline data was obtained from the learning discipline questionnaire score. The lowest score was 77, and the highest score was 112. The research result showed that the mean learning frequency is 99.38888889, and a standard deviation of 7.386751828 was obtained.

To interpret the scores obtained, the students are grouped into three groups: good, moderate, and poor. The distribution of the number of categories of students in the learning discipline can be seen in Table 5 as follows:

| Category | Score | f | Percentage (%) | | |
|----------|-------------------------------------|----|----------------|--|--|
| Good | <i>X</i> > 105,7756407 | | 18,51851852 | | |
| Moderate | $91,00213706 \le X \le 105,7756407$ | 20 | 74,07407407 | | |
| Less | <i>X</i> < 91,00213706 | | 7,407407407 | | |
| | Amount | 27 | 100 | | |

Table 5. Distribution of Students by Learning Discipline Category

From the results of the categorization, as shown in Table 5, it can be seen that the discipline of learning for VIII grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester of the academic year 2016/2017 is included in the medium category because the frequency is mostly located at intervals $91.00213706 \le X \le 105.7756407$ namely as many as 20 students or as much as 74.07407407%.

Student mathematics learning outcomes data obtained from student mathematics learning achievement test scores,

| | | 5 | | | |
|-----------------|----|----------------|---------|-------------------------------|-------------|
| Class Intervals | fi | x _i | x_i^2 | f _i x _i | $f_i x_i^2$ |
| 33-42 | 5 | 37.5 | 1406.25 | 187.5 | 7031.25 |
| 43-52 | 9 | 47.5 | 2256.25 | 427.5 | 20306.25 |
| 53-62 | 6 | 57.5 | 3306.25 | 345 | 19837.5 |
| 63-72 | 5 | 67.5 | 4556.25 | 337.5 | 22781.25 |
| 73-82 | 1 | 77.5 | 6006.25 | 77.5 | 6006.25 |
| 83-92 | 1 | 87.5 | 7656.25 | 87.5 | 7656.25 |
| Total | 27 | 375 | 25187.5 | 1462.5 | 83618.75 |

Table 6. Frequency Distribution of Mathematics Learning Outcomes

From the data in Table 6, the lowest score is 33, and the highest score is 89, the average price is 54.16666667, and the standard deviation is 13.00887271. The full calculation can be seen in Appendix 22

To interpret the scores obtained, the students are grouped into three groups: good, moderate, and poor. The distribution of the number of student categories on the mathematics learning outcomes of these students can be seen in Table 22 as follows

| Category | Score | f | Percentage (%) |
|----------|-------------------------------------|----|----------------|
| Good | <i>X</i> > 67,17553938 | 4 | 14,81481481 |
| Moderate | $41,15779396 \le X \le 67,17553938$ | 18 | 66,66666667 |
| Less | <i>X</i> < 41,15779396 | 5 | 18,51851852 |
| | Amount | | |

 Table 7. Distribution of Students by Mathematical Learning Outcomes Category

From the results of the categorization as shown in Table 7, it can be seen that the mathematics learning outcomes of Grade VIII students of SMP Muhammadiyah 1 Sewon, Bantul, even semester of the 2016/2017 school year are included in the medium category because the frequency is mostly located at intervals $41,15779396 \le X \le 67,17553938$ namely as many as 18 students or equal to 66.666666667%.

| Table 8. Summary | of Normality | Test Results |
|------------------|--------------|--------------|
|------------------|--------------|--------------|

| No. | Variable | χ^2_{count} | χ^2_{table} | df | Info. |
|-----|--|------------------|------------------|----|--------|
| 1 | Utilization of learning facilities (X ₁) | 3,067 | 5,991 | 2 | Normal |
| 2 | Learning independence (X ₂) | 1,304 | 5,991 | 2 | Normal |
| 3 | Learning discipline (X ₃) | 0,391 | 5,991 | 2 | Normal |
| 4 | Student mathematics learning outcomes (Y) | 1,197 | 7,815 | 3 | Normal |

| Tuble 7. Builling of Independent Test Results | | | | | | |
|---|------------------|------------------|-------------|--|--|--|
| Variable | χ^2_{count} | χ^2_{table} | Conclusion | | | |
| X_1 and X_2 | 29,79 | 37,65 | Independent | | | |
| X_1 and X_3 | 32,78 | 37,65 | Independent | | | |
| X_2 and X_3 | 24,87 | 37,65 | Independent | | | |

Table 9. Summary of Independent Test Results

| Table 10. Summary | of | Linearity | Test Results |
|-------------------|----|-----------|--------------|
|-------------------|----|-----------|--------------|

| No. | Variable | F _{count} | F _{table} | Conclusion |
|-----|---------------------|---------------------------|---------------------------|------------|
| 1 | X ₁ to Y | 0,5229087615 | 2,98 | Linear |
| 2 | X ₂ to Y | 0,3913804332 | 3,47 | Linear |
| 3 | X ₃ to Y | 0,2359579624 | 2,56 | Linear |

The first hypothesis test obtained a simple correlation coefficient (r) between the utilization of learning facilities (X₁) against student mathematics learning outcomes (Y) of 0.6875689017, the simple regression equation Y over X₁ is $\hat{Y} = -49,89985272 + 1,050073638X_1$ and t_{count} of 4.734546053. At the same time, t_table at a significant level of 5%, df = 25 equal to 1.7081. So that obtained t_{count} = 4,734546053 > t_{table} = 1,7081. Thus the first hypothesis has been tested by rejecting H_{0,1} and accepting H_{1,1}. There is a positive and significant relationship between the use of learning facilities and mathematics learning outcomes of eighth-grade students of SMP Muhammadiyah 1 Sewon, Bantul Regency, even semester 2016/2016.

The second hypothesis test obtained a simple correlation coefficient (r) between learning independence (X₂) against student mathematics learning outcomes (Y) of 0.4638697608, the simple regression equation Y over X₂ is $\hat{Y} = -16,14381677 + 0,7029414376 X_2$, and t_{count} = 2.618060601 while t_{he table} is at a significant level of 5%, df = 25 which is equal to 1.7081. So we get t_{count} = 2,618060601 > t_{table} = 1,7081. Thus the second hypothesis has been tested by rejecting H_{0,2} and accepting H_{1,2}. There is a positive and significant relationship between learning independence and mathematics learning outcomes of Grade VIII students of SMP Muhammadiyah 1 Sewon, Bantul Regency, even semester 2016/2016.

The third hypothesis test obtained a simple correlation coefficient (r) between learning discipline (X₃) to student mathematics learning outcomes (Y) of 0.5647946427, the simple regression equation Y over X₃ is $\hat{Y} = -56,1558183 + 1,103166019 X_3$ and $t_{count} = 3.422037633$. At the same time, t_{table} at a significant level of 5%, dk = 25 equal to 1.7081. So we get $t_{count} = 3,422037633 > t_{table} = 1,7081$. Thus the third hypothesis has been tested by rejecting H_{0,3} and accepting H_{1,3}. There is a positive and significant relationship between learning frequency and mathematics learning outcomes of eighth-grade students of SMP Muhammadiyah 1 Sewon, Bantul Regency, even semester 2016/2016.

The fourth hypothesis test obtained a multiple correlation coefficient (R) between the use of learning facilities (X₁) and learning independence (X₂) to student mathematics learning outcomes (Y) of 0.7031860744, the multiple linear regression equation Y over X₁ and X₂ is $\hat{Y} = -62,89869255 + 0,9244028585 X_1 + 0,2557851826X_2$. Furthermore, in testing the significance of the correlation coefficient using the F-test obtained F_{count} = 11,73749442 while F_{table} = 3,40 at a significant level of 5%, v₁ numerator = 2 and v₂ denominator = 24. So that obtained F_{count} = 11,73749442 > F_{table} = 3,40. Thus the fourth hypothesis has been tested by rejecting H_{0,4} and accepting H_{1,4}. There is a positive and significant relationship between learning facilities and learning independence with mathematics learning outcomes of eighth-grade students of SMPMuhammadiyah 1 Sewon Bantul Regency even semester 2016/2017 academic year.

The fifth hypothesis test obtained a multiple correlation coefficient (R) between the use of learning facilities (X₁) and learning discipline (X₃) on student mathematics learning outcomes (Y) of 0.7019174391, the multiple linear regression equation Y over X₁ and X₃ is $\hat{Y} = -67,69197925 + 0,8561048332 X_1 + 0,3709461756X_3$. Furthermore, in testing the significance of the correlation

coefficient by using the F-test $F_{count} = 11,65408696$ while $F_{table} = 3,40$ at a significant level of 5%, v_1 numerator = 2 and v_2 denominator = 24. So we get $F_{count} = 11,65408696 > F_{table} = 3,40$. Thus the fifth hypothesis has been tested by rejecting $H_{0,5}$ and accepting $H_{1.5}$. There is a positive and significant relationship between learning facilities and learning discipline with mathematics learning results for eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester 2016/2016.

In the sixth hypothesis test obtained by the coefficient of multiple correlations (R) between learning independence (X₂) and learning discipline (X₃) to student mathematics learning outcomes (Y) of 0.7527406463, double linear regression equation Y of X₂ and X₃ is $\hat{Y} = -136,7700086 +$ 0,7566985332 X₂ + 1,158480894X₃. Furthermore, in testing the significance of the correlation coefficient, the F-test obtained F_{count} = 15,68922869 while F_{tabel} = 3,40 at a significant level of 5%, v₁ numerator = 2 and v₂ denominator = 24. So that obtained F_{count} = 15.68922869 > F_{table} = 3.40. Thus the sixth hypothesis has been tested by rejecting H_{0,6} and accepting H_{1,6}. There is a positive and significant relationship between learning independence and learning discipline with mathematics learning results for eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester 2016/2017 academic year.

The seventh hypothesis test obtained a multiple correlation coefficient (R) between the utilization of learning facilities (X₁), learning independence (X₂). Learning discipline (X₃) on student mathematics learning outcomes (Y) of 0.76038772683, multiple linear regression equation of three predictors of Y above X₁, X₂, and X₃ are $\hat{Y} = -128,0849716 + 0,2376796668 X_1 + 0,6374109258 X_2 + 0,9547188982 X_3$. Furthermore, in testing the significance of the correlation coefficient using the F-test obtained F_{count} = 10,50895148 while F_{tabel} = 3,03 at a significant level of 5%, v₁ numerator = m = 3 and v₂ denominator = N - m - 1 = 23. It is obtained F_{count} = 10.50895148 > F_{table} = 3.03, and the seventh hypothesis has been tested by rejecting H_{0,7} and accepting H_{1,7}. There is a positive and significant relationship between learning facilities, learning independence, and learning discipline with mathematics learning results for eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester 2016/2017 academic year.

CONCLUSION

Based on the results of research and discussion, as described in Chapter IV, several research conclusions can be drawn as follows:

- 1. There is a positive and significant relationship between learning facilities and mathematics learning outcomes for students of class VIII of SMP Muhammadiyah 1 Sewon, Bantul, in the even semester of the 2016/2017 school year. This is indicated by the t-test, which is $t_{count} = 4,734546053 > t_{table} = 1,7081$. The simple correlation coefficient (r) between the utilization of learning facilities (X₁) against student mathematics learning outcomes (Y) of 0.687 with a linear regression equation $\hat{Y} = -49,89985272 + 1,050073638X_1$.
- 2. There is a positive and significant relationship between learning independence and mathematics learning outcomes of eighth-grade students of SMP Muhammadiyah 1 Sewon, Bantul Regency, even semester 2016/2017 academic year. This is indicated by the t-test, which is $t_{count} = 2,618060601 > t_{table} = 1,7081$. The simple correlation coefficient (r) between learning independence (X₂) against student mathematics learning outcomes (Y) of 0.463, with a linear regression equation $\hat{Y} = -16,14381677 + 0,7029414376 X_2$.
- 3. There is a positive and significant relationship between learning discipline and mathematics learning for eighth-grade students of SMP Muhammadiyah 1 Sewon, Bantul, in the even semester of the 2016/2017 school year. This is indicated by the t-test, which is $t_{count} = 3,422037633 > t_{table} = 1,7081$. The simple correlation coefficient (r) between learning discipline (X₃) against student mathematics learning outcomes (Y) of 0.5647946427 with a linear regression equation $\hat{Y} = -56,1558183 + 1,103166019 X_3$.

- 4. There is a positive and significant relationship between learning facilities and learning independence with mathematics learning outcomes of eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester of the 2016/2017 school year. This is indicated by the F test, namely $F_{count} = 11,73749442 > F_{table} = 3,40$. The multiple correlation coefficient (R) between the utilization of learning facilities (X₁) and learning independence (X₂) to student mathematics learning outcomes (Y) is 0.7031860744, with a linear regression equation $\hat{Y} = -62,89869255 + 0,9244028585 X_1 + 0,2557851826X_2$. The relative contribution of X₁ is 84.165%, and X₂ is 15.834%, and the effective contribution of X₁ is 41.617%, and X₂ is 7.829%.
- 5. There is a positive and significant relationship between the use of learning facilities and learning discipline with the results of mathematics learning for eighth-grade students of SMP Muhammadiyah 1 Sewon, Bantul Regency, even semester 2016/2017 academic year. This is indicated by the F test, i.e. $F_{count} = 11,65408696 > F_{table} = 3,40$. The multiple correlation coefficient (R) between the utilization of learning facilities (X₁) and learning discipline (X₃) to student mathematics learning outcomes (Y) is 0.7019174391, with a linear regression equation $\hat{Y} = -67,69197925 + 0,8561048332 X_1 + 0,3709461756 X_3$. The relative contribution of X1 is 78.222%, and X₃ is 21.777%, and the effective contribution of X₁ is 38.542%, and X₃ is 10.726%.
- 6. There is a positive and significant relationship between learning independence and learning discipline with mathematics learning results for eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester 2016/2017 academic year. The F test indicates this, i.e., $F_{count} = 15.68922869 > F_{tabel} = 3.40$. The multiple correlation coefficient (R) between learning independence (X₂) and learning discipline (X₃) to student mathematics learning outcomes (Y) is 0.752, with a linear regression equation $\hat{Y} = -136,7700086 + 0,7566985332 X_2 + 1,158480894X_3$. The relative contribution of X₂ is 40,879% and X₃ is 59,120% and the effective contribution of X₂ is 23,163% and X₃ is 33,498%.
- 7. There is a positive and significant relationship between learning facilities, learning independence, and learning discipline with mathematics learning results for eighth-grade students of SMP Muhammadiyah 1 Sewon Bantul Regency even semester 2016/2017 academic year. This is indicated by the F test, namely $F_{count} = 10.50895148 > F_{tabel} = 3.03$. Linear regression equation $\hat{Y} = -128,0849716 + 0,2376796668 X_1 + 0,6374109258 X_2 + 0,9547188982 X_3 With a double correlation coefficient (R) of 0.76038772683, student mathematics learning outcomes have something to do with the utilization of learning facilities and learning independence. Learning discipline amounted to 57.818%, while 42.181% is influenced by other factors not discussed in this study.$

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