1. Introduction

In everyday life, we are not free from problems that use the application of mathematics, so it is important to learning math. Studying geometry is an essential component as it allows students to analyze and interpret the environment around them [1-4]. The geometry courses in college contain definitions, axioms and theorems [5]. Mathematics pre-service teachers are required to understand the concepts clearly to apply their geometric skills. The skill of geometry according to Hoffer [6] consists of: (1) visual skill, (2) descriptive skill, (3) drawing skill, (4) logical skill, and (5) applied skill. If the pre-service teachers can apply geometric skills well, then they are expected to be able to teach and explain the concept systematically in a planned sequence, so that students easily to understand.

Visual skills in learning analytical geometry are closely related to recognizing and describing geometric shapes in real or abstract terms. Geometry ability also requires students to be able to build mathematical arguments that connect geometry with other mathematical concepts. The concept of analytical geometry will be more easily understood by students if it is presented in the form of images compared to if it is only presented in the form of algebra. The topics studied in analytic geometry relate to the equation of a circle, the position of a line concerning a circle, and tangents in a circle. A good visual ability of students can help students explore other geometric abilities such as logical skills and applied skills. Descriptive skills when analyzing analytical geometry is the ability of students to describe...
perceptions of geometry that are brought about mathematical concepts and other indicators of geometric abilities, for example, visual skills and drawing skills. Student drawing skills will be perfect if students have good visual skills and skill descriptions. Students will have difficulty drawing if they are unable to visualize and describe the meaning of the geometry problem they are facing. Images are geometric languages that are easy to understand, from the pictures students can practice their logical skills. For example, to find a circle equation formula centred in A (a, b), students can find it by describing and visualizing the circulating image of the circular equation in O (0,0). The central algebraic circle centred on O (0,0) can be analogous to the circle centred on A (a, b). Another ability that is most complex in learning geometry is logical skills and applied skills. These two capabilities are very closely related because Logical skills can support applied skills. Student's geometrical logic skills are good, giving implications in the form of good student skills also in solving geometric problems either real or abstract.

Mastery of five geometric abilities by prospective teacher of mathematics is expected to contribute greatly to the geometrical abilities of students who will be taught later. With this capability, students are expected to have good visual skills, descriptive skills, drawing skills, logical skills, and applied skills.

Ponte and Chapman [7] explained that to teach well, a teacher must know the taught material, the condition of the students, as well as the teaching techniques. Couto and Vale [8] stated that success in teaching geometry depends on the knowledge and methods of teachers at the time of teaching. Mathematics pre-service teacher are also required to teach the concept of geometry well. The concept of geometry can be explained by giving examples and not examples of any geometric material under study so that students can define the concepts of the examples [9-11]. The result of observation at the time of teaching practice shows that some students have not maximally applied their geometry skill. It can happen because of a lack of understanding of the concept of geometry or lack of confidence in explaining it.

Understanding the concept of geometry of prospective mathematics students has three classifications, namely, students who have high, middle, and low ability. Students who have high ability in geometry courses have good teaching skills. This can be seen from the ability to explain the concept of geometry and students' self-confidence when teaching practice in the course of micro learning. As for students who have low ability tends not confident in explaining the concept of geometry when teaching practice. This can happen because they are weak in mastering the concept of geometry.

The purpose of this study is to determine the relationship of understanding the geometry concept and teaching skills of mathematics pre-service teacher. They should explain the concept systematically in a planned sequence, so students easy to understand it. The results of this study can help full for lecturers to apply the learning process that can strengthen the concepts.

2. Methods
It is quasi-experimental research conducted at the Faculty of Teacher Training and Education in Unswagati Cirebon. The population is the students of the Micro Teaching course that will implement the teaching practice in school. The sampling is purposive. From two classes, we selected ten students as a sample.

The research instrument is a practice test. Data understanding of geometry concepts obtained from the score of the final exam Geometry courses. The data of teaching ability is from the value of teaching practice in the course of microteaching. Geometry material includes (1) visual skill, (2) descriptive skill, (3) drawing skill, (4) logical skill, and (5) applied skill [6]. Furthermore, the data were analysed using Pearson Product Moment correlation test and linearity test.

3. Result and Discussion
The final test score for the students' geometry concept comprehension exists in table 1.
Table 1. Geometry Score of Students

| Student | Visual skill | Descriptive skill | Drawing skill | Logical skill | Applied skill | Average Geometry Score |
|---------|--------------|-------------------|---------------|---------------|---------------|------------------------|
| M-1     | 98           | 99                | 98            | 98            | 97            | 98                     |
| M-2     | 74           | 71                | 69            | 69            | 67            | 70                     |
| M-3     | 68           | 75                | 69            | 67            | 71            | 70                     |
| M-4     | 90           | 94                | 95            | 96            | 95            | 94                     |
| M-5     | 80           | 81                | 79            | 76            | 74            | 78                     |
| M-6     | 87           | 84                | 88            | 87            | 84            | 86                     |
| M-7     | 88           | 89                | 88            | 86            | 79            | 86                     |
| M-8     | 92           | 94                | 88            | 88            | 78            | 88                     |
| M-9     | 89           | 92                | 93            | 94            | 92            | 92                     |
| M-10    | 93           | 99                | 98            | 98            | 97            | 97                     |

Teaching skills under study are geometric skills that include (1) visual skill, (2) descriptive skill, (3) drawing skill, (4) logical skill, and (5) applied the skill. The score of teaching ability is from the pre-service teachers (students) practice teaching in microteaching courses. The material used for teaching practice is geometric for High School and Junior High School. The scores of teaching ability are in table 2.

Table 2. The scores of Teaching Ability

| Student | Visual skill | Descriptive skill | Drawing skill | Logical skill | Applied skill | Average scores of teaching ability |
|---------|--------------|-------------------|---------------|---------------|---------------|-----------------------------------|
| M-1     | 100          | 100               | 100           | 100           | 100           | 100                               |
| M-2     | 85           | 85                | 90            | 90            | 85            | 87                                |
| M-3     | 75           | 75                | 80            | 70            | 70            | 74                                |
| M-4     | 95           | 90                | 90            | 95            | 90            | 92                                |
| M-5     | 80           | 80                | 85            | 80            | 80            | 81                                |
| M-6     | 80           | 80                | 85            | 85            | 80            | 82                                |
| M-7     | 80           | 80                | 85            | 85            | 80            | 82                                |
| M-8     | 85           | 85                | 85            | 85            | 80            | 84                                |
| M-9     | 100          | 95                | 95            | 100           | 95            | 97                                |
| M-10    | 80           | 80                | 90            | 90            | 90            | 86                                |

The Pearson Product Moment correlation coefficient test is used to know the degree of correlation between concept comprehension and student's teaching ability on geometry. If the significance value <0.05 then there is a correlation, and if the significance value > 0.05 then there is no correlation.
Table 3. Correlation Coefficient Test Results

| Score Geometry | Pearson Correlation | Sig. (2-tailed) | N |
|----------------|---------------------|----------------|----|
| Geometry Score | 1                   | .682(*)        | 10 |
| Teaching Skills| .682(*)             | .030           | 10 |

Based on table 3, the understanding of the concept and the ability of students to teach on geometric material has a value of 0.03. So, 0.03 < 0.05 which means there is a significant correlation between geometry values, in this case, the ability to understand student concepts and teaching skills.

The linearity test at a significant level of 0.05 is performed to know the linear relationship between conceptual comprehension and student's teaching ability on geometry. The result is said to have a linear relationship, if the understanding of the concept and ability to teach students on the topic of geometry has a significant value < 0.05.

Table 4. Linearity Test

| Model | Sum of Squares | df | Mean Square | F     | Sig. |
|-------|----------------|----|-------------|-------|------|
| 1     | Regression     | 258.790 | 1 | 258.790 | 6.954 | .030(a) |
|       | Residual       | 297.710 | 8 | 37.214  |       |      |
| Total |                | 556.500 | 9 |         |       |      |

a Predictors: (Constant), Score Geometry
b Dependent Variable: Teaching Skills

The result of linearity test in table 4 shows that F value = 6.954 with significant value 0.030 < 0.05. Compare the value with the F table calculated on the df of the numerator = 1 and df denominator = 8 at a significant level of 0.05 obtained F table = 5.32. It is clear that the value of F arithmetic = 6.954 > F table = 5.32 and significant value 0.030 < 0.05. So, it can be concluded that between the understanding of the concept and the ability to teach students about the material geometry, there is a linear relationship.

A closeness of relationships between variables expressed by the correlation coefficient (r), grouped according to the following criteria:

Table 5. Guilford Empirical Rules

| r Value | Interpretation of Relationships |
|---------|---------------------------------|
| 0.00 < r < 0.20 | Very weak |
| 0.20 ≤ r < 0.40 | weak |
| 0.40 ≤ r < 0.70 | moderate |
| 0.70 ≤ r < 0.90 | Strong |
| 0.90 ≤ r ≤ 1.00 | Very Strong |

The value of correlation coefficient (r) = 0.682 in table 3 shows the level of closeness of the relationship between students' concept comprehension and their teaching abilities on a geometric material. The level of relationship between the two variables based on Guilford Empirical Rules in Table
5 [12] is in the moderate category (0.682 is between 0,400 to 0,700). The relationship indicates a positive direction. It means that the improvement of students' concept of understanding is directly proportional to their teaching ability.

The coefficient of determination (R square) = 0.465 = 46.5% indicates the magnitude of the effect of understanding the concept of students on the ability of teaching on geometry material. It shows that other factors that influence the ability of students to teach geometry material in addition to understanding the concept of students are equal to 53.5%.

4. Conclusion
This research concludes that the understanding of geometry concept in the students has a relationship with the ability to teach geometry when the students do the teaching practice in the microteaching course. The results of the study found that students who had good skills in visual skills, descriptive skills, drawing skills, logical skills, and applied skills based on UAS results had good abilities in teaching geometry based on five abilities according to Hoffer [6]. This can be seen from the ability of students to explain the resolution of mathematical problems related to circle material such as mentioning circle elements and drawing circles in the Cartesian plane. From the drawings made, students can explain various problems such as the position of the line to the circle and determine the equation of the line in the circle according to the mathematical problems given.

The relationship clearly seen from the F value = 6.954 > F table = 5.32 and significant value 0.030 < 0.05. The level of closeness of the relationship between students’ conceptual understanding and teaching ability is in the moderate category. There are other factors of 53.5% that affect the ability to teach on geometry in addition to understanding the concept.

5. References
[1] Ozerem A 2012. Misconception in geometry and suggested solution for seventh-grade students. International Journal of New Trends in Arts, Sports & Science Education 1 4 23-35
[2] Muhassanah N, Sujadi I and Riyadi 2014 Analysis of student geometry skills in solving geometry problems based on van hiele thinking level Electronic Journal of Mathematics Learning. 2 1 54-66
[3] Zuya H E, Kwalat S K 2015 Teacher’s knowledge of student about geometry. International Journal of Learning, Teaching and Education Research 13 3 100-114
[4] Zuya H E 2014 Mathematics teachers’ responses to students’ misconceptions in algebra. International Journal of Research in Education Methodology 6 2 830-36
[5] Sugeng S, Nurhanurawati M C 2018 The effect of various media scaffolding on increasing understanding of students’ geometry concepts. Journal on Mathematics Education. 9 1 95-102
[6] Hoffer 1981 Geometry is more than proof. NCTM Journal. 74 1 11-14
[7] Ponte J and Chapman O 2008 Preservice mathematics teacher’s knowledge and development. Handbook of International Research in Mathematics Education (2nd ed.) 223-261
[8] Couto A and Vale I 2014 Pre-service teacher’ knowledge on elementary geometry concepts. Journal of the European Teacher Education Network 9 57-73.
[9] Cunningham R F and Roberts A. 2010 Reducing the mismatch of geometry concept definition and concept images held by pre-service teachers. Journal: Issues in the Undergraduate Mathematics Preparation of School Teachers 1
[10] Henderson K B 1970 The teaching of secondary school mathematics, 1970 Yearbook of the National Council of Teacher of Mathematics 166-195. (Washington, DC: NCTM)
[11] Lovric T and Jorgensen R 2016 Pre-service teacher mathematics content knowledge: implication for how mathematics is taught in higher education. Journal: Teaching Mathematics and Its Application 35 202-215
[12] Guilford J P 1969 Fundamental statistic in psychology and education (New York: McGraw Hill)

Acknowledgements
Our gratitude goes to the Directorate of Research and Community Service and Director General of Research and Development of the Ministry of Research and Technology of Higher Education of the Republic of Indonesia who has funded the research scheme of novice lecturers. Our gratitude also goes to the Rector and Research Institute of the University of Swadaya Gunung Jati.