Mathematics 1050
Quiz 1 with solutions

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Name: ____________________________

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I. The figures represent the square numbers.

1. Draw the next square number.

2. Describe the pattern and list the next three square numbers.

3. What is the next twelfth square number.

Solution:

1. The next square is given by

   ![Next square](image)

   \[ 25 \]

2. As we see, the sequence of numbers related to the squares are 1, 4, 9, 16. That can be rewritten as \(1^2, 2^2, 3^2, 4^2\), hence the pattern can be given by the \(n\)th square "squared". Hence, we have that

\[ 1^2, 2^2, 3^2, 4^2, 5^2, 6^2, 7^2. \]

Thus, we get 1, 4, 9, 16, 25, 36, 49.

3. Following the pattern, the twelve square is given by \(12^2 = 144\).