Relation in the Sequence of Odd Numbers Between Consecutive Square Numbers

A. Choose the correct answer:

1. What is the difference between two consecutive square numbers like 4^2 and 5^2?

a) 8 b) 10

c) 9 d) 11

2. The difference between 9 and 4 is

a) 3 b) 5

c) 7 d) 2

3. The difference between consecutive square numbers increases by

a) 2 b) 1

c) Odd numbers d) Even numbers

4. Which of the following is not an odd number?

a) 3 b) 5

c) 6 d) 9

5. What is the next odd number after 11?

a) 12 b) 13

c) 14 d) 15

B. Write the Missing Terms to Complete the Sentences:

1. The square of 4 is _____ and the square of 5 is _____.
2. The difference between 36 and 25 is _____.
3. The difference between 49 and 36 is an _____ number.
4. The difference between consecutive square numbers follows a pattern of _____ numbers.
5. 1, 3, 5, 7, 9 are examples of _____ numbers.

C. Mark each sentence with a True (✔) or False (✗):

1. The difference between 5^2 and 4^2 is 9 _____
2. The difference between two square numbers is always even _____
3. 7 is an odd number between 4^2 and 5^2 _____
4. Odd numbers appear in a regular pattern between square numbers _____
5. All square numbers have an odd number between them _____

D. Figure out the answers to these questions:

1. Find the difference between 6^2 and 5^2 and write the result.
2. Write the first five square numbers and the differences between each pair.
3. List the sequence of odd numbers between the squares of 3 and 6.
4. Write a short explanation of how square numbers grow using odd numbers.
5. Complete the pattern: $1^2 = 1$, $2^2 = 4$, $3^2 = 9$. Differences = 3, ___, ___.

E. Challenge yourself with these questions:

1. Write the square numbers from 1^2 to 10^2 and find the differences between each.
2. Show with a pattern how odd numbers can be added to get square numbers.
3. Draw a dot square for 3^2 and 4^2 and count the added dots.
4. Fill in the blanks: $1^2 = 1$, $2^2 = 4$ (difference = 3), $3^2 = 9$ (difference = ___).
5. How many odd numbers lie between the squares of 6 and 8? Write them.