

Multiplying Consecutive Integers By 9:

A. There is a pattern that develops when multiplying consecutive integers by 9:

1. If you are multiplying consecutive increasing integers by 9 (the numbers MUST start with 1) and adding the next consecutive number, then use the following:

a. Write the same number of 1's as the number that is being added.

Ex [1] $1234 \times 9 + 5 = \underline{\hspace{2cm}}$.

a. In this example we simply write 5 1's.

b. The answer is 11111.

Ex [2] $123456 \times 9 + 7 = \underline{\hspace{2cm}}$.

a. In this example we write 7 1's.

b. The answer is 1111111.

2. Sometimes the problem will try to trick you by adding something other than the next digit.

Ex [3] $12345 \times 9 + 4 = \underline{\hspace{2cm}}$.

a. Normally, the last number should be 6 but since it is 4, we must subtract 2.

b. So the answer is $111111 - 2$ or 111109.

c. The answer is 111109.