Preinforme de matemáticas discretas

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1. The language I chose was C#, why C# though? I feel safe using C# because it (as of now) is my strongest programming language and the one that I understand the most; Honestly, I don’t have an argument to back my decision because of my shallowness in other languages and neither do I have arguments in favor or against any language and C#
2. The succession of pentagonal numbers can be visually defined as the number of dots that can be arranged evenly in a pentagon; its formula is .

The number counts the total numbers of dots in the figure (on the border and inside)

1. The Fibonacci sequence is one of the most famous formulas in mathematics.

Each number in the sequence is the sum of the two numbers that precede it. So, the sequence goes: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, and so on. The mathematical equation describing it is .

1. In C# I can use the library “Big integer” typing the command “using Systems.Numerics.BigInteger”

Resources used during the investigation:

<https://math.stackexchange.com/questions/453562/formula-for-pentagonal-numbers>

<https://www.livescience.com/37470-fibonacci-sequence.html>

<https://stackoverflow.com/questions/279038/working-with-incredibly-large-numbers-in-net>