FibSeq Tivenan

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February 2019

1 Changing the Catalan's Identity

I found that by changing the two initial numbers of the of the Fibonacci sequence to the values of the original Fibonacci sequence (where the first term was 0, and the second term was 1) allowed the Catalan's Identity to be true. For example, If the first term was 1 and the second term was 2 the Catalan's Identity would be satisfied. One is the 2nd term and the first term of the Fibonacci sequence while two is the third term. This pattern continues on and on. If we start with the fourth term in the original Fibonacci sequence, 3 as the first term and fifth term, 5, of the original Fibonacci sequence as the second term of the sequence, then Catalan's identity works as well. Some of the other pair of terms that work were 8 and 13, 21 and 34. These terms all came from the original Fibonacci sequence. Catalan's Identity doesn't apply for Fibonacci Sequence values that are not in sequence with each other. For example if we tried 3 as are first term and 8 as are second term Catalan's principle doesn't apply. The values of the first and second term have to be followed by each other. Catalan's Identity doesn't work for values that are not in the Fibonacci sequence.