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Dear Neil,

Last night I was perusing Tomorrow's Math by C. Stanley Ogilvy, 2nd edition, page 46. The author was discussing partitions of a circle and gave the following formula:

$$n + \frac{(n-1)(n-2)(n^2 - 3n + 12)}{24}$$



This matches Sequence 427, and you may want to add this formula to your file. The author also pointed out that the sequence could be obtained by summing the first five terms in each line of Pascal's Triangle. I was curious of the terms left in the triangle after removing the first five, and obtained this sequence:

1 7 29 93 256 638 1486 3302 7099 14913 30827 63019  
127858 258096 519252 1042380 2089605 4185195 8377705 16764265  
33539156 67090962 134196874 268411298 536843071 1073709893

given by the expression

$$2^{n+4} - n - 5 - \frac{(n+3)(n+4)(n^2 + 7n + 22)}{24}$$

The sequence matches your Seq. 1851, Radon Partitions, except for the last term. I think the one you list has a good chance of being in error, and should be 1486 instead of 1586. You may want to check into this.

I hope you are well and have survived the winter satisfactorily. Ours was very cold, and cost us an unusually large amount in heating bills. Things are pleasant now.

Apples have become a serious part of this family. In addition to this one, daughter Anne has an Apple II Plus, and daughter Lois and her husband (you met her) just bought a 512K Macintosh. They are very fond of it, and so are their two boys (ages 5 and 6). In fact, the boys can handle some features of it better than I can, particularly the graphics, which fascinates them. I haven't yet found out how to operate the Mac in machine language.

I still keep up my correspondence with John Wrench, as well as with several other mathematicians, even overseas; so life is very pleasant for me, in spite of being nearly 73. Esther and I plan to do some traveling in April and again in June.

Best regards,

Herman