Баллы 4,00/4,00

Оценка **10,00** из 10,00 (**100**%)

Вопрос **1**

Верно

Баллов: 1,00 из 1,00

Find the number of solutions of the equation

$x_1 + x_2 + \ldots + x_p = m,$

such that $x_k \geq l$ for all k. ($m, p, l \geq 0$ are given.)

Please avoid using '!' (the factorial sign). For $\binom{n}{k}$ write 'binomial'.

Ответ: binomial(p+m-p*l-1, p-1) ✔

Вопрос **2**

Верно

Баллов: 1,00 из 1,00

Find the number of ways to distribute 7 red balls, 8 blue ones and 9 green ones to two people so that each person gets 12 balls. The balls of one color are indistinguishable.

Ответ: 60 ✔

Вопрос **3**

Верно

Баллов: 1,00 из 1,00

Find the generating function for the number of Young diagrams of a given semiperimeter.

Please use the variable q.

There exists a diagram with zero boxes...

Ответ: (1-2*q+q^2)/(1-2*q) ✔

Вопрос **4**

Верно

Баллов: 1,00 из 1,00

$(1+q)(1+q^3)(1+q^5)(1+q^7)\ldots$ is the generationg function of

- a. The number of partitions of n into an odd number of summands
- b. The numbers of self-conjugate partitions (i.e. ones whose Young diagrams are symmetric with respect to the diagonal) ✔
- c. The numbers of partitions of n into distinct odd summands
- d. The numbers of partitions of n into odd summands

Ваш ответ верный.