COCI 2009/2010 **Task DOMINO**

1. round, 24. october 2009.

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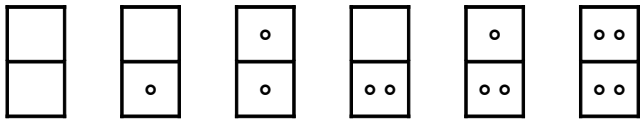
Dominoes are gaming pieces used in numerous tile games. Each doimno piece contains two *marks*. Each mark consists of a number of *spots* (possibly zero). The number of spots depends on the *set* size. Each mark in a size **N** domino set can contain between 0 and **N** spots, inclusive. Two tiles are considered identical if their marks have the same number of spots, irregardles of reading order. For example tile with 2 and 8 spot marks is identical to the tile having 8 and 2 spot marks. A proper domino set contains no duplicate tiles. A **complete** set of size **N** contains all posible tiles with **N** or less spots and no duplicate tiles. For example, the complete set of size 2 contains 6 tiles:



Write a program that will determine the total number of spots on all tiles of a complete size **N** set.

INPUT

The first and only line of input contains a single integer, **N** ($1 \leq \mathbf{N} \leq 1000$), the size of the complete set.

OUTPUT

The first and only line of output should contain a single integer, total number of spots in a complete size **N** set.

SAMPLE TESTS

input	**input**	**input**
2	3	15
output	**output**	**output**
12	30	2040

Second sample description:
Size 3 set contains tiles: [0|0], [0|1], [0|2], [0|3], [1|1], [1|2], [1|3], [2|2], [2|3] and [3|3].