Chess on Planet X

Problem

Chess on Planet X is very different from chess on Earth. It has a piece called the Super Queen, which can move and attack as a knight, a rook, and a bishop at the same time. Howevever its powerful attack can be blocked with a Pawn, just like chess on Earth. Given an **n-k** x **n-k** chessboard, count the number of ways of placing **n** Super Queens and **k** pawns on it, such that none of the Super Queens are attacking each other.

The Input

There is a number of inputs. Each input is **n** (**n**<19) and **k** (**k**<6) on a single line.

The Output

For each input, output the number of ways on a single line.

Sample Input

```
13 1
18 4
```

Sample Output

```
72
16
```

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