Rule of Sum

If your bag contains apples and oranges, the total number of fruits in the bag is the sum of the number of apples and the number of oranges. This trivial remark is called sometimes the *sum rule* and can appear in different situations. The total length of a playlist is the sum of the lengths for the individual tracks (if there are no pauses). If a program consists of two consecutive blocks and the two blocks make n and k steps, respectively, then the whole program makes $n + k$ steps. For example, the following Python code prints the word "Hi!" eight times (since the two *for* loops perform three and five iterations).

```
1    for _ in range(3):
2        print('Hi!')
3    for _ in range(5):
4        print('Hi!')
```

Run

Reset

If at some moment the format of the license plates changes and temporarily both old and new license plates are valid, then the total amount of possible valid plates is the sum of the number of old-style plates and new-style ones.

Problem. In one move, a piece on a chessboard moves either one cell up or one cell to the right. How many moves are needed to get from the bottom left corner to the position shown in the figure below (that is, from the cell $(1, 1)$ to the cell $(4, 6)$)?