Problem N. New Time

Time limit: 2 seconds
Memory limit: 512 megabytes

Nikolay has a digital clock that displays time in 24-hour format, showing two integers: hours (from 00 to 23) and minutes (from 00 to 59). For example, the clock can show `00:00`, `18:42`, or `23:59`.

The clock has two buttons that can be used for manual adjustment:

- Button A sets the clock forward by 1 minute. For example, `05:33` becomes `05:34`, `16:59` becomes `17:00`, and `23:59` becomes `00:00`.
- Button B sets the clock forward by 1 hour. For example, `01:42` becomes `02:42`, and `23:14` becomes `00:14`.

Nikolay has noticed that the time on his clock does not look right. He wants to adjust the clock to the correct time by pressing the buttons as few times as possible.

Find the smallest number of button presses needed to adjust the clock.

Input

The first line contains the time shown on the clock in the `hh:mm` format ($00 \le$ `hh` ≤ 23; $00 \le$ `mm` ≤ 59).

The second line contains the correct time in the same format.

Output

Print a single integer — the smallest number of button presses Nikolay needs to adjust the time on his clock.

Examples

standard input	standard output
11:57 12:00	3
09:09 21:21	24
19:44 08:50	19

Note

In the first example test, Nikolay can adjust the time by pressing button A three times.

In the second example test, Nikolay should press button A and button B 12 times each.