Set for Team 162

Suppose you have been working late night these days to complete your course assignments and due class works. During this tough time, you are not having the time to get proper long hour sleeps, so you have decided to sleep during the work intervals for shorter hours. For serving your purpose, you wish to develop your own Alarm Clock application. While making that application, an issue has risen up to your mind that, you need to know how many hours you are going to sleep before setting the alarm. Therefore, upon setting the alarm for a given time, your application should be able to tell you the time duration from current time till the alarm rings. Now, you need to develop an easy solution/algorithm to understand the time duration **in minutes** from a given time to another time.

Input

The input contains several test cases. Each test case is described in one line, containing four integers h1, m1, h2 and m2, with h1: m1 representing the current hour and minute, and h2:m2 representing the time (hour and minute) when the alarm clock is set to ring $(0 \le h1 \le 23, 0 \le m1 \le 59, 0 \le h2 \le 23, 0 \le m2 \le 59)$.

The end of the input is indicated by a line containing only four zeros, separated by blank spaces.

Output

For each test case, your program must print one line, containing a single integer, indicating the number of minutes remaining before the alarm rings.

Sample Input and Output

1 5 3 5 ----- 120 23 59 0 34 ----- 35 21 33 21 10 ---- 1417 0 0 0 0