Hands meeting

Given the hour, calculate the minimum number of minutes that a clock needs so that it's hands were in the same position.

Input

There is unknown number of tests. Each of them consist of two integers: **h** and **m** which represent the starting hour (0<h<25, 0<=m<60).

Output

For each test print the minimal number of minutes which the clock needs so that it's hands were in the same position.

Example

Input:
3 0
12 0
17 47
15 15
8 44
13 6
Output:
16
0
46
1
0
65