Hands meeting

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English version

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: \mathbf{h} and \mathbf{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:

30

120

17 47

15 15

8 44

13 6

Output:

16

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46

1

65