Good Evening-Morning

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

On an unknown planet deep in the universe, a day consists of 24 moments, numbered from 0 to 23 (only integer moments are considered in this problem). Moments 6 to 17 of a day are **daytime**, while moments 0 to 5 and 18 to 23 are **nighttime**. The moment after 23 is moment 0 of the next day.

Little A and Little E live in different cities. There may be a time difference between the two cities. Little E's time zone is d moments later than Little A's time zone. That is, if Little A's time zone is at moment t, then Little E's time zone is at moment $(t + d) \bmod 24$.

Now, Little A is currently at moment t_0. Little A wants to send a "good evening-morning" greeting to Little E, but when she sends the message, Little A must be in **daytime** and Little E must be in **nighttime**. What is the minimum number of moments she must wait to send this greeting? Note that there may be cases where she can never send the message.

Input

The input consists of a single line containing two integers d and t_0 ($0 \le d, t_0 \le 23$).

Output

Output an integer representing the minimum number of moments Little A must wait. If she needs no waiting, output 0. If she can never send the message, output -1.

Examples

standard input	standard output
8 12	0
0 16	-1
16 20	10

Note

- In the first test case, Little A is initially at moment 12, and Little E is initially at moment 20. At this moment, Little A is in daytime and Little E is in nighttime, so she can send the "good evening-morning" immediately.
- In the third test case, Little A is initially at moment 20, and Little E is initially at moment 12. After waiting 10 moments, Little A is at moment 6 and Little E is at moment 22. At this moment, she can send the "good evening-morning".