Problem I. Rise of Shadows

Input file: `standard input`
Output file: `standard output`

Azeroth is a world full of fantasy. In Azeroth, there are H hours in a day and M minutes in an hour.

You found a clock made from Azeroth. The clock has two hands — the hour hand and the minute hand. The two hands point to the same direction at the start of a day. Either hand rotates at a constant speed. The hour hand goes around a full circle in H hours and the minute hand goes around a full circle in M minutes. Surprisingly, it is night in Azeroth if and only if the angle between the two hands is less than or equal to α.

Now you're wondering, given $\alpha = \frac{2\pi A}{HM}$, how many integral moments (i.e., integer minutes since the start of the day) are there, such that the angle between the two hands is less than or equal to α.

Input

The only line of the input contains three integers H, M ($2 \le H, M \le 10^9$) and A ($0 \le A \le \frac{HM}{2}$), representing the number of hours in a day and the number of minutes in an hour, and the limit of the angle in radians, respectively.

Output

Print an integer representing the answer.

Examples

standard input	standard output
5 5 4	9
3 5 1	3