It's About Time
Problem ID: itsabouttime

Greg Orian works for the Temporal Innovations for Multiple Earths (TIME) program. One of his main jobs is determining yearly calendars for the numerous human colonies on various planets (did we mention this problem takes place in 2123?). One issue when creating calendars is the schedule for leap days. On GoE (Good ol' Earth) the rules for leap years are the following:

1. Any year divisible by 4 is a leap year, unless
2. the year is divisible by 100 in which case the year is not a leap year, unless
3. the year is divisible by 400 in which case the year is a leap year.

Leap days are needed since the 365 days in the calendar year is not exactly equal to the time for GoE to orbit the sun, which is more like 365.24219 days (known as the *tropical* year). This system does a good job in closely approximating the tropical year while also being fairly simple to remember.

While this works fine for GoE, it obviously won't work for planets with different tropical years. The colonists have enough to adjust to already (lower oxygen levels, colonial in-fighting, people-eating plants, etc.) so Greg wants to come up with rules that are similar to the ones for GoE. He's hit on the following scheme for finding three values n_1, n_2 and n_3 for determining when a year is a leap year:

1. The number of days d in a non-leap year is the number of days in a tropical year, rounded to the nearest integer. If the fractional number of days is exactly 0.5, round the number of days up.
2. If you rounded the tropical year down then
   (a) every year divisible by $n_1 > 1$ is a leap year (i.e., you add 1 day that year), unless
   (b) the year is divisible by n_2 (where $n_1 < n_2$ and n_2 is a multiple of n_1) in which case the year is not a leap year, unless
   (c) the year is divisible by n_3 (where $n_2 < n_3 \leq 1\,000$ and n_3 is a multiple of n_2) in which case the year is a leap year.
3. If you rounded the tropical year up then the same rules apply except that you subtract 1 day from leap years instead of adding 1 (would these be leak years?).

For GoE these numbers would be $d = 365, n_1 = 4, n_2 = 100$ and $n_3 = 400$. Given the distance a planet is from its sun (we'll assume a circular orbit), the speed the planet travels around its sun and the number of hours in the planet's day determine the n_i values above to best approximate that planet's year. Note that the best approximation may overestimate or underestimate the actual tropical year length, regardless of the direction of rounding.

Input

Input contains a single line with three positive integers r s h where $r \leq 1\,000\,000\,000$ is the distance in miles of the planet from the sun, $s \leq 1\,000\,000$ is the speed the planet travels in miles/hour, and $h \leq 1\,000$ is the number of hours in the planet's day. The length of a tropical year is guaranteed to be at least one day (h hours) in length.

Output

Output the values n_1 n_2 n_3 as described above. It there are multiple values that give the same best approximation, then output any of them.

Sample Input 1	Sample Output 1
`92998938 66660 24`	`4 100 400`

Sample Input 2	Sample Output 2
`92998938 66660 25`	`2 6 30`