A speeding ticket can be expensive. Is it worth it? It’s surprising how little time is gained by speeding.

Given a distance (in miles) and two speeds (in miles per hour) determine the difference in time to travel the distance.

Input

There will be several test cases in the input. Each test case will consist of three integers on a sinle line, d (1<=d<=10,000), s1 and s2 (1<=s1<s2<=1000), where d is a distance in miles, and s1 and s2 are speeds in MPH. The integer will be separated by a single space, and there will be no leading or trailing blanks. The input will end with a line with three 0s.

Output

For each test case, output a time in the form:

H:MM:SS

padded with a 0 if necessary. Seconds should be rounded. Hours should use the minimum number of digits necessary. Output no spaces. Do not print a blank line between numbers.

Sample Input

21 70 80

26 65 80

0 0 0

Sample Output

0:02:15

0:04:30