AP - Complete The Series (Easy)

Arithmetic and geometric Progressions are 2 of the well known progressions in maths.

Arithmetic progression(AP) is a set in which the difference between 2 numbers in constant. for e.g., 1, 3, 5, 7, 9 In this series the difference between 2 numbers is 2.

The task here is very simple indeed.

You will be given the 3rd term, 3rd last term and the sum of the series. You need print length of the series & the series.

Input

First line will contain a number indicating the number of test cases.

Each of the following t lines will have 3 number '3term', '3Lastterm' and 'sum'

3term - is the 3rd term in of the series and

3Lastterm - is the 3rd term in of the series and

sum - is the sum of the series.

Output

For each input of the test case, you need to print 2 lines.

First line should have 1 value - the number of terms in the series.

2nd line of the output should print the series numbers separated by single space.

Example

Input:

1 3 8 55

Output:

10

12345678910

NOTE:

- In all the test cases, all the series elements are positive integers.
- The series will have at least 7 elements.
- number of test cases <=100.
- All the numbers will fit in 64 bits (long long in C)