Mutiple Set

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	512 megabytes

Peter is obsessed with mathematics. He often works on interesting mathematical problems. Once he became interested in the problem of multiples. Let $\mathcal{S}_{[L,R]}(x)$ be the set of multiples of x in the interval $[L, R]$. Formally, $\mathcal{S}_{[L,R]}(x) = \{d | L \leq d \leq R, x|d\}$.

He defines the weight of a set as the sum of all elements of the set. Then he sums up the weight of all non-empty subsets of $\mathcal{S}_{[L,R]}(x)$ and obtains the result K.

Unfortunately, Peter is forgetful. After he has accomplished the calculation tasks, he forgets what the initial x is. However, he has written down the interval $[L, R]$ and the result K. Now he wants you, a smart XCPCer, to tell him all the possible x.

Input

This problem contains multiple test cases.

In the first line, one integer $T(1 \leq T \leq 100)$ represents the number of calculation tasks Peter has accomplished.

In the following T lines, each line contains three integers $L, R(1 \leq L \leq R \leq 10^{12})$ and $K(1 \leq K \leq 10^{14})$, which represent the interval and the result respectively.

Output

For each task, if there is no legal x, output `No Solution`. If the number of legal x is over 10^5, output `Too Many!`. Otherwise, output the number of legal x in the first line, then output all legal x in ascending order in the next line, separated by spaces.

Example

standard input	standard output
10 25 37 25 10 38 28 53 112 82 343 1839 1373 2451576 8343226 60034488 3402021 5387344 3855560 1332880393 1809278150 6322710186 79896573 1625195292 12360010488 217028134566 876902973439 657118365564 693979750091 779344640488 2981730890110	1 25 1 28 2 41 82 1 1373 1 2501437 2 1927780 3855560 2 243181161 351261677 1 515000437 1 657118365564 1 42596155573