Problem I: **Number Convertor**

**In this problem, you are given two positive integers, and followed by numbers . Using four basic arithmetic operations (addition, subtraction, multiplication and division(use floor to reach an integer)) and only the given numbers, convert into . For instance suppose**  and and the numbers are given to you. Two different ways to convert to are as follow:

1. **First multiply by** , then add to the result for two times.
2. **Add**  to , times.

**There is just one more point that you should consider; different arithmetic operations have different costs. These costs are represented as a**  table, in which the cell , of this table contains the cost of addition, subtraction, multiplication and division with as a second operand respectively. You should find the minimum cost to convert to such that you never reach a number more than and less than zero.

## **Input**

**The number of test cases comes in the first line. For each test case, first there are three integer and . Then you are given positive integer . Finally, in the last lines in each line there are positive integer that represent cost of operations.**

## **Output**

For each test case, print the minimum cost to convert to or IMPOSSIBLE, if we can not convert to .

|  |  |  |
| --- | --- | --- |
| **Sample Input** | | **Sample Output** |
| **1**  **45 768 3**  **6 2 12**  **1 2 3 4**  **1 2 3 4**  **4 3 2 1** | **7** | |