# **An Arithmetic Problem**

A sequence is an arithmatic sequence if every two succesive number has same difference. Suppose this is a sequence of numbers:

*a*<sub>1</sub>, *a*<sub>2</sub>, *a*<sub>3</sub>,.....*a*<sub>n</sub>

This is an arithmatic sequence if  $a_i a_{i+1}$  is same for each *i* from 1 to *n*-1.

You are given first 3 terms of a sequence and the value of n. If it is an arithmatic sequence you must print the nth term. Otherwise you must print "Error".

## Input Format:

In First line there will an integer T denoting number of test cases. Each of the next 3 lines will contain 4 integers  $a_1$ ,  $a_2$ ,  $a_3$  and n.

## **Output Format:**

In each line specify the case number and print the answer.

#### **Constraints:**

-300<=*a*<sub>1</sub>, *a*<sub>2</sub>, *a*<sub>3</sub><=300

1<=n<=1000

#### Sample Input:

3

1 2 3 10

1 4 3 10

15 30 45 5

# Sample Output:

Case 1: 10

Case 2: Error

Case 3: 75

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