Find the Insect



Consider a 2D-coordinate system. An insect is initially at the position (0, l). At time t = 0, the insect starts moving in a circular manner that it is always at a distance of l units from the origin (0, 0). At time t = 1s, the insect is p units away from the X-axis. Find the y-coordinate at time t = X.

Input Format

- ullet The first line contains the number of test cases T.
- Each line of the following test cases contains three integers l, p, X.

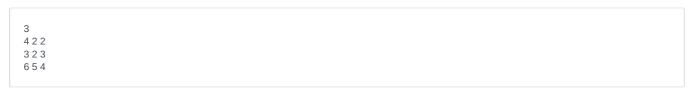
Constraints

- $1 \le T \le 10^3$
- $1 \le p \le l \le 10^9$
- $1 \le X \le 10^{18}$

Output Format

For each test case, find the y-coordinate. The y-coordinate can be expressed in a a/b format, where $gcd(b, 10^9 + 7) = 1$. If B is the modular inverse of b w.r.t $10^9 + 7$ then print the value of (a * B)%1000000007.

Sample Input 0



Sample Output 0

100000005 55555557 148148145