# 2199 Can you solve this equation?

**Problem Description**

Now,given the equation 8\*x^4 + 7\*x^3 + 2\*x^2 + 3\*x + 6 == Y,can you find its solution between 0 and 100;  
Now please try your lucky.

**Input**

The first line of the input contains an integer T(1<=T<=100) which means the number of test cases. Then T lines follow, each line has a real number Y (fabs(Y) <= 1e10);

**Output**

For each test case, you should just output one real number(accurate up to 4 decimal places),which is the solution of the equation,or “No solution!”,if there is no solution for the equation between 0 and 100.

**Sample Input**

2

100

-4

**Sample Output**

1.6152

No solution!

#include <stdio.h>

#include <math.h>

#include <algorithm>

#include <string.h>

#include <math.h>

using namespace std;

double cal(double x)

{

return 8\*x\*x\*x\*x+7\*x\*x\*x+2\*x\*x+3\*x+6;

}

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

double n;

scanf("%lf",&n);

if(cal(0)>n || cal(100)<n)

{

printf("No solution!\n");

continue;

}

double k = 0.0,r = 100.0;

double mid = (k+r)/2;

while(fabs(cal(mid)-n)>1e-5)

{

if(cal(mid)>n)

r = mid-1;

else

k = mid+1;

mid = (k+r)/2;

}

printf("%.4f\n",mid);

}

return 0;

}