#include <stdio.h>

#include <math.h>

void parse(char \*s, int& A, int& B) {

A = 0, B = 0;

int i, g = 0, f = 0, neg = 1;

for(i = 0; s[i]; i++) {

if(s[i] == 'x') {

if(g)

A += neg\*f;

else

A += neg;

g = 0, f = 0, neg = 1;

} else {

if(s[i] == '-') {

if(g)

B += neg\*f;

g = 0, f = 0;

neg = -1;

} else if(s[i] == '+') {

if(g)

B += neg\*f;

g = 0, f = 0;

neg = 1;

} else

f = f\*10 + s[i]-'0', g = 1;

}

}

if(g)

B += neg\*f;

}

int main() {

int t, i;

scanf("%d", &t);

char s1[502], \*s2;

while(t--) {

scanf("%s", s1);

for(i = 0; s1[i]; i++) {

if(s1[i] == '=') {

s2 = s1+i+1;

s1[i] = '\0';

break;

}

}

int la, lb, ra, rb;

parse(s1, la, lb);

parse(s2, ra, rb);

if(la == ra && lb == rb)

puts("IDENTITY");

else if(la == ra && lb != rb)

puts("IMPOSSIBLE");

else

printf("%d\n", (int)floor((double)(rb-lb)/(la-ra)));

}

return 0;

}