1012 ×××××

Problem Description

$$y=a_mx^m+a_{m-1}x^{m-1}+\cdots+a_1x$$
 (0, $+\infty$) $y=X$

$$n$$
 $lacksquare$ i $1 \leq i \leq n$ h_i

$$w_i$$
 $imes imes ime$

$$i \hspace{0.1cm} 1 \leq i \leq n \hspace{1cm} w_i imes \mathrm{dis}_i \hspace{0.1cm} \mathrm{dis}_i$$

$$\{0\} \cup [10^{-9},10^{10})$$

Input

$$T \ 1 \leq T \leq 100$$
 $n+2$ $n,m,X,Y \ 1 \leq n \leq 1$

$$n,m,X,Y \hspace{0.2cm} 1 \leq n \leq 6 \hspace{0.2cm} 1 \leq m \leq 5 \hspace{0.2cm} -10^5 \leq X \leq -1$$
 $2 \leq Y \leq 10^5$

$$m \qquad a_1, a_2, a_3, \cdots, a_m \ \ 0 \leq a_1, a_2, \cdots, a_{m-1} \leq 100 \ \ 1 \leq a_m \leq 100$$

$$n \qquad i+2 \;\; 1 \leq i \leq n \qquad \qquad h_i, w_i \;\; 1 \leq h_i < Y \;\; 1 \leq w_i \leq 100$$

 $\times \times \times \times n > 3 \times \times \times \times \times \times \times \times \times \times$

Output

C++
$$d \in \{0\} \cup [10^{-9}, 10^{10})$$
 d

```
void output(long double x) {
    static char s[25];
    sprintf(s, "%.4Le", x);
    for(int i: {0,1,2,3,4,5,6,7})    printf("%c", s[i]);
    printf("%c", s[strlen(s)-1]);
}
```

Sample Input

```
2
2 1 -5 3
1
1 1
2 2
2 2 -5 5
0 1
2 1
2 2
```

Sample Output

```
2.3570e+0
2.0937e+0
```

Hint

$$X=-5$$
 $Y=3$ $y=x$
$$x=rac{5}{3} \qquad x=0$$
 $rac{5\sqrt{2}}{3}$ 2.3570226040 $2.3570e+0$

