

Pencil Case

Bibi wants to make a cylinder pencil case with R cm radius and H cm height. Help her calculate the pencil case's surface area using π exactly equals to 3.14.

Format Input

The first line of the input contains an integer T, the number of test case. The next T line contains an integer R and H.

Format Output

For each test case, print "Case #X: Y" with X is the number of test case and Y is the pencil case's surface area with 2 digits after comma.

Constraints

- $1 \le T \le 10^3$
- $1 \le R \le 100$
 - 1 < *H* < 100

Sample Input (standard input)

Sample Output (standard output)

Case #1: 226.08 Case #2: 68452.00 Case #3: 3899.88

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Pencil Case

Bibi ingin membuat kotak pensil silinder dengan jari-jari R cm dan tinggi H cm. Bantulah Bibi dengan menghitung luas permukaan kotak pensil dengan menggunakan $\pi = 3.14$.

Format Input

Baris pertama dari input terdiri dari bilangan bulat positif T, jumlah kasus uji. T baris berikutnya terdiri dari bilangan bulat R dan H.

Format Output

Untuk setiap kasus, output "Case #X: Y" dengan X adalah nomor kasus dan Y adalah luas permukaan kotak pensil dengan 2 angka dibelakang koma.

Constraints

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- $1 \le R \le 100$
 - 1 < *H* < 100

Sample Input (standard input)

Sample Output (standard output)

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