

Output

The output for every scenario begins with a line containing 'Scenario # i :', where i is the number of the scenario starting at 1. Then print a single line containing I , E , and A , the area A rounded to one digit after the decimal point. Separate the three numbers by two single blanks. Terminate the output for the scenario with a blank line.

Sample Input

```
2
4
1 0
0 1
-1 0
0 -1
7
5 0
1 3
-2 2
-1 0
0 -3
-3 1
0 -3
```

Sample Output

```
Scenario #1:
0 4 1.0

Scenario #2:
12 16 19.0
```