

**STA Online Computer Programming Contest (DWITE)**  
**October 2003**

**Problem 1**

**Area of Rectangle**

Given the Cartesian plane coordinates for the opposite corners of a rectangle  $(x_1, y_1)$  and  $(x_2, y_2)$ , calculate the area of the rectangle.

The input file (DATA1) will contain five lines of data. Each line will contain four integer values,  $x_1, y_1, x_2$  and  $y_2$  representing the coordinates.  $-32768 \leq x_1, y_1, x_2, y_2 \leq 32767$ .

The output file (OUT1) will contain five lines of data, corresponding to the input file. Each line will contain the area of the rectangle in square units.

**Sample Input (Only three lines given)**

```
2 4 4 8
1 1 2 2
10 10 100 100
```

**Sample Output**

```
8
1
8100
```