

**STA Online Computer Programming Contest (DWITE)**  
**February 2004**

**Problem 3**

**Multiplying Fractions**

Your job, in this program, is to multiply three fractions and reduce the product to the lowest mixed fraction.

For example:  $7/3 * 2/5 * 12/5 = 168/75 = 2 \ 18/75 = 2 \ 6/25$

The input file (DATA3) will contain five lines of data. Each line will contain three proper or improper fractions, in the form  $n/d$ , where  $0 \leq n < 1000$ ,  $0 < d < 1000$ . The fractions are separated by an asterisk, \*.

The output file (OUT3) will contain five lines of data, corresponding to each line of the input file. Each line will contain the product of the three fractions, reduced to its lowest mixed fraction. The whole number of the mixed fraction (if present) will be separated from the proper fraction (if present) by a single space.

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

```
7/3*2/5*12/5
1/4*1/7*12/1
0/5*23/128*19/38
```

**Sample Output**

```
2 6/25
3/7
0
```