

2003-2004

American Computer Science League

Problem #2

All-Star Contest

ADJACENT FRACTIONS

PROBLEM: Two fractions are defined to be adjacent if $\frac{A}{B} - \frac{C}{D} = \frac{1}{N}$.

INPUT: There will be 5 input lines. Each line will consist of 4 integers representing A,B,C, and D.

OUTPUT: For each input line determine if the fractions are adjacent fractions. If they are, print their difference in $\frac{1}{N}$ form written as 1,N. If they are not adjacent fractions, print "NOT ADJACENT".

SAMPLE INPUT

1. 1,11,1,12
2. 20,19,19,19
3. 3,4,2,3

SAMPLE OUTPUT

1. 1,132
2. 1,19
3. 1,12