Problem H. Pi Approximation

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	512 mebibytes

Vasya has a robot which can calculate the number of distinct right triangles that can be constructed from a given collection of sticks: one can take three sticks and use them as three sides of a triangle. Unfortunately, the robot can distinguish only angles of a triangle and does not distinguish its sides. So, the robot's calculations assume that similar triangles are equal. Two triangles are similar if one can be obtained from the other using uniform scaling, translation, rotation, and reflection.

Vasya's friend Petya discovered an amazing fact. If the robot is given n sticks with integer lengths from 1 to n, and the result of the robot's calculations is then divided by n, the number we obtain is a good approximation for the irrational number $\frac{1}{2\pi}$.

Vasya used the idea proposed by Petya for all integers n from $n_{\min}$ to $n_{\max}$ inclusive, and wrote down the results. Time has passed, and Vasya lost the results of the experiment, while his robot broke. Help him to once again find the best approximation of π that can be obtained if we use the idea for all integers n from $n_{\min}$ to $n_{\max}$. Here, x is a better approximation to π than y if $|\pi - x| < |\pi - y|$.

Input

The first line contains an integer t, the number of test cases ($1 \le t \le 100$). The next t lines contain test cases, one per line. Each test case is denoted by two integers $n_{\min}$ and $n_{\max}$ ($5 \le n_{\min} \le n_{\max} \le 200\,000\,000$, $n_{\max} - n_{\min} < 100$).

Output

For each test case, print a line containing a reduced fraction which is the best approximation of π that could be found using Petya's idea. Separate numerator, the division sign, and divisor by spaces.

Example

standard input	standard output
5 5 6 5 13 14 17 91 100 99999901 100000000	3 / 1 13 / 4 17 / 6 47 / 15 99999967 / 31830978

Explanation

In the third test case, among four approximations $\{\frac{7}{2}, \frac{15}{4}, 4, \frac{17}{6}\}$, fraction $\frac{17}{6}$ is the best one because its value is closest to π.