Junior Knights Fraction Class Exercise

A fraction class has been written for you with the following methods:

```
// Creates a fraction object from a string that is of the form
// x/y, where x and y are integers.
public fraction(String s);

// Creates a fraction with numerator n, denominator d.
public fraction(long n, long d) {

// Returns this plus other.
public fraction add(fraction other);

// Returns this minus other.
public fraction sub(fraction other);

// Returns this times other.
public fraction mult(fraction other);

// Returns this divided other.
public fraction div(fraction other);

// Returns this to the power exp.
public fraction pow(int exp);

// Returns true iff this equals other.
public boolean equals(fraction other);

// Returns true iff this is greater than other.
public boolean greaterthan(fraction other);

// Returns true iff this is less than other.
public boolean lessthan(fraction other)
```

Use this fraction class to write the following exercises:

1) Write a fraction game that asks the user how many questions they want, and then generate that many fraction questions. (You can pick the operation, or even choose a random operation for each problem.) Read in the user's answers as strings and determine if they are correct or not! At the end of the game, report how many questions the user got correct.

2) Consider the following problem: Sarah creates a solution of acid. p percent of her solution has strength a/b, while the rest of her solution has strength c/d. What is the overall strength of her acid? Write a program to ask the user to enter p, a/b and c/d and calculate the result as a fraction!

3) Think of other programs that could use the fraction class!