

# Instructions – Participant ID: 49

## Objective

- Your target class: `org.magee.math.Rational`
- Test the class as thoroughly as possible with the help of EvoSuite.
- You have 60 minutes time. You are finished earlier if you a) have written test cases to cover all the code, and b) are sure there are no further bugs.
- To start the experiment enter your participant ID at <http://study.evosuite.org> and follow the instructions.

## Notes on EvoSuite

- Use EvoSuite to generate the initial test suite:  
Right click on `org.magee.math.Rational` the package explorer and select EvoSuite → Generate JUnit Test Suite.
- EvoSuite will place the resulting test suite in:  
`evosuite-tests/org/magee/math/TestRational.java`
- Put your own tests only in this file.
- Generated assertions may be wrong and need to be analyzed/fixed.
- Feel free to remove assertions or to `@Ignore` tests you do not understand.
- If a generated test case does not compile, just delete it.
- When calling EvoSuite again on the same class, it will ask to overwrite/rename the old class.

## Your Target Class: `org.magee.math.Rational`

A rational number is any number that can be expressed as the quotient or fraction  $p/q$  of two integers, with the denominator  $q$  not equal to zero. Please refer to the JavaDoc comments for details on the intended behaviour of the class. If unsure, just ask us.

## Notes on Testing

- There are bugs. A test revealing a bug should fail.
- Tests not revealing bugs should pass.
- You do not need to identify the actual bugs in the code.
- You may fix obvious bugs, but do not waste time debugging.

## Notes on the Experiment

- Please do not install additional plugins in Eclipse.
- Please do not change the build process.
- Please adhere to exam conditions. No conferring, no mobile phones.

## When you're finished

- Before you quit, execute the entire final test suite.
- Please don't exit without filling out the exit survey.