

When have we tested enough?

Required reading (before Seminar 2)

Testing principles [Mye04]

- Definition of the expected output or result;
- Avoid testing your own program.
- A programming organization should not test its own programs.
- Thoroughly inspect the results of each test.
- Test cases for valid/invalid input conditions.
- Test if the program does not do what it is supposed to do, AND if the program does what it is not supposed to do.
- Do not throwaway test cases.
- Plan testing assuming errors will be found.
- The probability of the existence of more errors in a section of a program is proportional to the number of errors already found in that section.
- Testing is an extremely creative and intellectually challenging task.

Testing axioms [Pat05]

- It is impossible to test a program completely.
- Software testing is a risk-based exercise.
- Testing can't show that bugs don't exist.
- The more bugs you find, the more bugs there are.
- The pesticide paradox.
- Not all the bugs you find will be fixed.
- When a bug's a bug it is difficult to say.
- Product specification are never final.
- Software testers aren't the most popular member of a project team.
- Software testing is a disciplined technical profession.