

# Sky Technical Test - Agile Testing

Prerequisites:

- Computer with PHP CLI installed.
- Understanding of [http://docs.behat.org/quick\\_intro.html](http://docs.behat.org/quick_intro.html)

The aim of the test is to provide automated test coverage for our calculator using Behat. We have included Behat in the source, so it doesn't matter if you don't already have it installed.

You can run the test in the tests/acceptance directory, using a command like the following:  
`php behat.phar`

Behat will respond and show the status of the test. Note that one of the scenarios includes an unimplemented step.

## Part 1

Referring to the Gherkin that has already been written, write Gherkin to cover the remaining calculator functionality, namely: addition, subtraction, and division. You should implement scenarios for any edge cases that you can think of.

## Part 2

Write Behat 'steps' to implement all of the Gherkin, building on the example steps given in `tests/acceptance/features/bootstrap/FeatureContext.php`

## Part 3

Extend the Calculator class to make ScientificCalculator, which implements the iScientificCalculator interface. Write tests for and implement the following features:

- factorial
- decimal to hexadecimal conversion
- cube root

## Part 4

Update the steps so that further calculator functions can be supported without writing more steps.

## Bonus Part

Currently Calculator does not obey operator precedence. Alter ScientificCalculator to do so, and have the following test scenario pass:

```
Scenario: Multiply and add numbers using the correct operator precedence
Given I enter "5" into the calculator
And I hit "add"
And I enter "10" into the calculator
And I hit "multiply"
And I enter "2" into the calculator
And I hit "equals"
Then I see a result of "25"
```

*On completion of the above parts, please push your fork to git. Don't worry if you don't finish all of the parts, we're more interested in how you do the parts which you do complete.*