

Experiment ‘p5_1_b_average’ Results

December 18, 2025

Experiment outcome: SUCCESS

Bad responses: 0

Responses containing assume : 0

Resolution attempts: 1

Hard fails (resolution): 0

Soft fails (resolution): 0

Verification attempts: 1

Problem Specification

Problem name: p5_1_b_average

Natural language statement: Write a method that returns the average of the arguments.

Method signature: p5_1_b_average(x: real, y: real, z: real) returns (average: real)

Ensures

- `average == (x + y + z) / 3.0`

GenAI interactions

Below you will find all interactions between the ‘user’ (program) and the ‘assistant’ (OpenAI).

Program → GenAI

You are given the following task to perform in Dafny:

Write a method that returns the average of the arguments.

The signature should be:

```
method p5_1_b_average(x: real, y: real, z: real) returns (average: real)
```

The method should respect the following contract:

```
ensures average == (x + y + z) / 3.0
```

Produce and show only the Dafny body of this method, including the curly braces that surround it. Do not show the signature nor contract. You must not use 'assume' anywhere in your code.

GenAI → Program

System fingerprint:

ID: chatcmpl-Co4tRL42yJrMujNsaY4WLOTC08DCo

Model: gpt-5.1-chat-latest

Created at: 1766051245

Finish reason: stop

Usage: 274 tokens in, and 37 tokens out

```
{  
    average := (x + y + z) / 3.0;  
}
```

Final Program

```
method p5_1_b_average(x: real, y: real, z: real) returns (average: real)  
    ensures average == (x + y + z) / 3.0  
{  
    average := (x + y + z) / 3.0;  
}
```

Total Token Usage

Input tokens: 274

Output tokens: 37

Reasoning tokens: 0

Sum of ‘total tokens’: 311

Experiment Timings

Overall Experiment started at 1766051247119, ended at 1766051250130, lasting 3011ms (3.01 seconds)
Iteration #1 started at 1766051247119, ended at 1766051250130, lasting 3011ms (3.01 seconds)