
Table of Contents

| | |
|---------------------------------------|---|
| | 1 |
| Workspace Prep | 1 |
| PART 1: Defining the Function | 1 |
| PART 2: Using Bracketing Method | 1 |
| PART 3: Using Bisection Method | 1 |
| PART 4: Using Newton's Method | 1 |
| PART 5: Using Halley's Method | 1 |
| PART 6: Plotting P(x) | 1 |
| PART 7: Plotting absolute error | 2 |
| Comments on Time and Slope | 2 |
| Halley's Method Function | 2 |
| Newton's Method Function | 2 |
| Bisection Function | 2 |
| Bracketing Function | 2 |

Workspace Prep

PART 1: Defining the Function

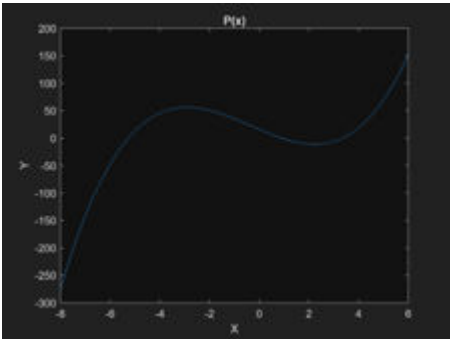
PART 2: Using Bracketing Method

PART 3: Using Bisection Method

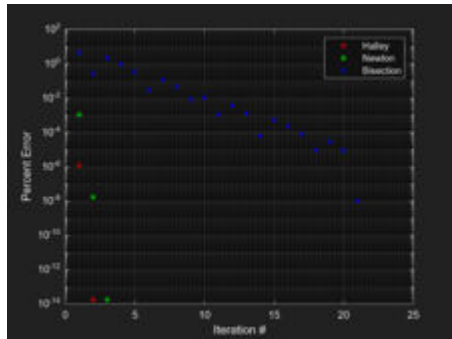
PART 4: Using Newton's Method

PART 5: Using Halley's Method

PART 6: Plotting P(x)



PART 7: Plotting absolute error



Comments on Time and Slope

Halley's Method Function

Halley's Method Results:

```
Avg time to calculate: 9.1088e-05s
-5.264102458433700    0.0000000000000004
 0.897598082398080   -0.0000000000000004
 3.352304376035620    0.0000000000000011
```

Newton's Method Function

Newtons Method Results:

```
Avg time to calculate: 8.5665e-05s
-5.264102458433700    0.0000000000000004
 0.897598082398080      0
 3.352304376035620    0.0000000000000011
```

Bisection Function

Bisection Method Result:

```
Avg time to calculate: 0.00015469s
-5.264102458953857   -0.000000027616064
 0.897598028182983    0.000000820012298
 3.352304339408875   -0.000000774683048
```

Bracketing Function

Bracketing Method

```
-5.3000000000000002   -5.2000000000000003
 0.7999999999999997    0.8999999999999997
 3.2999999999999998    3.3999999999999998
```

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