This is a title

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1.1 This is the subsection name

Theorem 1.1.1 *Name of thm*

This is a theorem.

Theorem

Definition 1.1.2 (Name for df). This is a definition.

Definition

Example 1.1.3

This is an example

Solution 1.

□

Solution.

□

Remark 1.1 *This is a remark*

Proof 2. This is a proof ■

Proof.

□

Disproof 3.

■

Disproof.

□

Corollary 1.4 : This is a corollary

Lemma 1.5 : This is a lemma

Proposition 1.6 : This is a proposition

Conjecture 1.7 : This is a conjecture

Axiom 1.8 : This is an axiom.

Claim 1.1.9

Claim

Answer.m

```m
% Plot function f(x) = 2*x^3 - x - 2
ezplot('2*x^3-x-2', [0, 2])
hold on
plot([0, 2], [0, 0], 'r')
```

```
def __self__(self):
for i in range(10):
    print(f"This number is {i}.")
```

```
public static void main(String[] args) {
    System.out.println("Hello World!"); // comment
}
```

Algorithm 1: Bisection Algorithm

Input: $a, b, M, \delta, \varepsilon$
$u \leftarrow f(a)$
$b \leftarrow f(b)$
$e \leftarrow b - a$
Output: output

```
1  begin
2      if sign(u) = sign(v) then
3          stop
4      for k=1 to M do
5          e ← e/2
6          c ← a + e
7          w ← f(c)
8          return k, c, w, e
9          if |e| < δ or |w| < ε then
10             stop
11         if sign(u) ≠= sign(v) then
12             b ← c
13             v ← w
14         else
15             a ← c
16             u ← w
```