STAT 230 Midterm II Review

Sami Yousef

Contents

Chapter	rirst Chapter	rage 2
1.1	First Section	2
1.2	Algorithms	3
1.3	Second Section	3
1.4	Third Section	3
$C1 \longrightarrow 1 \longrightarrow 0$		
Chapter 2	Second Chapter	Page 4
2.1	First Section	4
Chapter 3	Third Chapter	Page 5
3.1	First Section	5
Chapter 4	Founth Chanter	Domo 6

First Chapter

1.1 First Section

Definition 1.1.1: Example Definition

Here is an example of a definition. It is a definition of a definition. But really, it is just some filler stuff as an example.

Question 1

Here is an example of a question. It is a question of a question. Can you answer it?

Solution: Here is an example of a solution. It is a solution of a solution. But really, it is just some filler stuff as an example.

Note:-

Here is an example of a note. It is a note of a note. But really, it is just some filler stuff as an example.

Claim 1.1.1 Topology

Topology is cool

Example 1.1.1 (Open Set and Close Set)

A set is open if it contains its interior. A set is closed if it contains its closure.

Theorem 1.1.1

If $x \in \text{open set } V \text{ then } \exists \ \delta > 0 \text{ such that } B_{\delta}(x) \subset V$

Corollary 1.1.1

By the result of the proof, we can then show...

Lenma 1.1.1

Suppose $\vec{v}_1, \ldots, \vec{v}_n \in \mathbb{R}^n$ is subspace of \mathbb{R}^n .

Proposition 1.1.1

1 + 1 = 2.

1.2 Algorithms

```
Algorithm 1: what
   Input: This is some input
   Output: This is some output
   /* This is a comment */
 1 some code here;
 \mathbf{z} \ x \leftarrow 0;
\mathbf{3} \ \mathbf{y} \leftarrow 0;
 4 if x > 5 then
 5 x is greater than 5;
                                                                                           // This is also a comment
 6 else
 7 x is less than or equal to 5;
 s end
9 foreach y in 0..5 do
10 y \leftarrow y + 1;
11 end
12 for y in 0..5 do
13 y \leftarrow y - 1;
14 end
15 while x > 5 do
16 x \leftarrow x - 1;
17 end
18 return Return something here;
```

1.3 Second Section

1.4 Third Section

Second Chapter

2.1 First Section

Third Chapter

3.1 First Section

Fourth Chapter