1   Introduction

- Good afternoon. My name is Fraser Love for my BSc Honours project I have been investigating Chaos in Topological Dynamical Systems.

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- In this presentation I will first give the definition of a topological dynamical system.

- Then I will introduce some basic topological dynamics and give examples of such systems.

- Next I will discuss what exactly it means to be chaotic, before giving a formal definition of some of these characteristics.

- Next I shall introduce the most widely accepted definition of chaos called Devaney chaos and explore some consequences of this definition.

- Finally we shall conclude the presentation by using propositions we have developed to prove that a specific topological dynamical system called the shift map is chaotic.

3   Dynamical System Definition

- Firstly, what is a dynamical system?