

Lecture 1: Exercise 2

Explanation

This is another case of learning to think like a physicist. You must be able to define the things that allow us to place things into categories. Here we are defining the categories that describe the different laws for simple six-state dynamical systems. This ability is important to a physicist as it allows you to find links among abstract systems.

Hint

What is it that constitutes a dynamical law for the six-state systems? What makes one rule different from another?

Answer

You can categorize the six-state systems by, first, how many cycles there are. Secondly, we can categorize by how many cycles are contained within specific cycles.