The Theoretical Minimum
Classical Mechanics - Solutions
L01E02

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Exercise 1. *Can you think of a general way to classify the laws that are possible for a six-state system?*

From what precedes, we can think of classifying systems by their number of cycles. We could furthermore refine the classification, for instance by considering the distribution of states per cycle.

The official solutions[1] mentions an interesting fact, not directly apparent from the book's examples: there could be cycles within the "main" cycles (and cycles within the "secondary" cycles, etc.), which can also be used to refine the classification.

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[1] http://www.madscitech.org/tm/slns/l1e2.pdf