Induction - Fundamentals

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Introduction

Main Idea

Subramani Mathematical Induction

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A non-trivial proposition has an infinite number of cases. If we can prove that (a) the proposition is valid for the first case, and (b) if the proposition is valid for a given case, then it must be valid for the subsequent case, then the proposition is valid.

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Each type of induction is accompanied by its own axiom schema. Is there a proof of validity for induction? These schemata are to be accepted as is, i.e., there is no proof for them.

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Each type of induction is accompanied by its own axiom schema. Is there a proof of validity for induction? These schemata are to be accepted as is, i.e., there is no proof for them. But it can be shown that each of them is reducible to the other three.