Deductive vs. Inductive vs. Abductive Reasoning

Feature	Deductive Reasoning	Inductive Reasoning	Abductive Reasoning
Starts With	General Principle / Rule	Specific Observations / Data	Incomplete Observations / Puzzle
Process	Apply rule to specific case	Identify pattern, generalize	Form likeliest explanation
Conclusion	Logically Certain (if premises true)	Probable / Likely (based on evidence)	Plausible Hypothesis / Best Guess
Direction	Top-Down (General to Specific)	Bottom-Up (Specific to General)	Inference to Best Explanation
Main Use	Proof, Application of Rules	Discovery, Prediction, Theory Forming	Diagnostics, Hypothesis Generation