This tutorial on Aristotle’s underlying logics begins with a treatment of his demonstrative logic, the principal motivation for his interest in the field. It ends with a faithful translation of Aristotle’s categorical syllogistic into a Hilbert-style many-sorted logic. Demonstrative logic, or apodictics, studies demonstration as opposed to persuasion. It presupposes the Socratic knowledge/opinion distinction—between knowledge (beliefs that are known) and opinion (those that are not known). Every demonstration produces (or confirms) knowledge of (the truth of) its conclusion for every person who comprehends the demonstration. Persuasion merely produces opinion. Aristotle was the first to see that every demonstrative science presupposes for its deductions what Church called an underlying logic. Aristotle presented a general truth-and-consequence conception of demonstration meant to apply to all demonstrations not just to those that are complete categorical syllogisms. According to him, a demonstration is an extended argumentation that begins with premises known to be truths and involves a chain of reasoning showing by deductively evident steps that its conclusion is a consequence of its premises. For Aristotle, starting with premises known to be true and a conclusion not known to be true, the knower demonstrates the conclusion by deducing it from the premises. As Tarski emphasized, modern formal proof resulted from refinement and “formalization” of traditional Aristotelian demonstration. Aristotle’s general theory of demonstration required a prior general theory of deduction presented in the Prior Analytics. His general immediate-deduction-chaining conception of deduction was meant to apply to all deductions, not just to complete categorical syllogisms. For him, any deduction that is not immediately evident is an extended argumentation that involves a chaining of immediately evident steps that shows its final conclusion to follow logically from its premises.