

MATH 218M2: RESPONSE PROMPTS FOR HAACK
DUE 11/18

Susan Haack, “Chapter 5: Intuitionism”, in *Deviant Logic: Some Philosophical Issues* (1974). Sections 1–4 (pages 91–103).

In *Deviant Logic*, Haack surveys a number of systems of logic and discusses some philosophical issues raised by the existence of alternative logics to classical logic. Unlike with our other readings, her concerns are not feminist, and are more in line with ‘standard’ philosophy of logic. In Chapter 5 she discusses a species of logic known as intuitionistic logic. She surveys the reasons the intuitionists gave for the use of this logic.

Let me caution you that the intuitionists were mathematicians and their views on logic were very much concerned about mathematics. As such, this section touches on developments within twentieth century mathematics. You should expect not to be familiar with every reference in the chapter, and some of the technical examples you may want to skim over. What I would like you to get out of this reading is an understanding of some of the philosophical issues. You are not expected to understand all of the technical content.

*Response Prompts

For Each Prompt You should write one or more paragraphs. You are not writing a full essay, but you should write enough to fully respond to the question.

- (1) What is the intuitionist view of the nature of mathematics? How does this conflict with the views of their philosophical rivals?
- (2) What are the consequences for this view on what the proper logic for mathematics ought be?
- (3) What is the intuitionist interpretation of the logical connectives \rightarrow (implication) and \neg (negation)?
- (4) The reasons that the intuitionists reject classical logic are quite different from Plumwood’s reasons. Are those reasons compatible? Or are they in conflict?

SUGGESTED EXTENDED READING

These are selections from the extended reading which address topics related to this week’s core reading.

- Arend Heyting, “Chapter 1: Disputation” in *Intuitionism: An Introduction* (1956).