

## ASSIGNMENT 10

due *Friday*, December 7**Instructions**

By Friday, November 30:

- Read through page 287 in Chapter 11 of TTT, if you haven't already.
- Download and start reading the handout on Computability and Incompleteness.
- Read the introduction to Chapter 12 of TTT, on pages 301-302.

By Monday, December 3:

- Read pages 309-322 in Chapter 12 of TTT, in conjunction with the handout.

By Wednesday, December 5:

- Read pages 302-309 in Chapter 12 of TTT, in conjunction with the handout.

By Friday, December 7:

- Read pages 339-341 in Chapter 13 of TTT, and then
- read pages 343-346.

By Monday, December 10:

- Read Chapter 14 of TTT.

Turn in the homework assignment at the beginning of class on *Friday, December 7*.

Study for the final exam, which will take place on Friday, December 14, from 9-11. *Note that this is a half-hour later than the time posted by the registrar.* I will announce a review session and extra office hours in class. There is some additional information at the end of this assignment.

Note that, for lack of time, we have skipped some very interesting discussions in the textbook. I encourage you to go back and read them one day, perhaps on a rainy Sunday afternoon.

**Homework assignment**

1. Explain carefully how Kant, Frege, and the Logical Positivists account for the truth of the statement " $5+7=12$ ." (M)
2. Kant, Frege, and the Logical Positivists all use the word "analytic," but they use it in very different ways. Discuss this. (M)
3. Discuss the similarities and differences between the Logical Positivists' views of scientific activity and Quine's. (M)
4. Characterize the following viewpoints in the philosophy of mind, using a couple of sentences for each: dualism, behaviorism, materialism, and functionalism.
5. Study question 1 on page 313 of TTT.

6. Study question 2 on page 308 of TTT.

**Thought questions**

1. Study questions 1-3 on page 240 of TTT.
2. Review questions 1-13 on page 245 of TTT.
3. The study question on page 282 of TTT.
4. Study question 2 on page 313 of TTT.
5. What does it mean for a set of strings to be *computable* by a Turing machine?
6. Give an example of a set of strings that is computably enumerable, but not computable
7. Characterize the “computational view of the mind.”
8. Study question 2 on page 318 of TTT.
9. Review questions 5 and 6 on page 336 of TTT.
10. Review question 3 on page 364 of TTT.

**Information regarding the final exam**

The final exam will be slightly longer than the two midterms, but otherwise it will be similar in format. Roughly half of the questions will focus on material that we covered since the second midterm, while the other half of the questions will cover more general material from the entire course. For example, I may ask you to compare an empiricist viewpoint, like that of Locke, to a rationalist viewpoint, like that of Descartes. Or I may ask you to compare some of the differences between rationalism and the empiricism to differences between the philosophies of Plato and Aristotle. So, in studying, it makes sense to emphasize the more recent material; but you should look over notes and readings from before the second midterm to help you “recollect” what you already know.

On the final, in each section, you will have some choice as to which questions you wish to answer.

As far as dates are concerned, the policy is the same as for the second exam: I would like you to know general chronology, especially insofar as the various philosophers we have discussed influenced each other. I will not ask you to name specific dates.

As far as mathematical content, you should be able to understand and work out examples similar to the ones in lecture and on the homework assignments.