

Philosophy of Mathematics – Essay 2 (Logicism)

Primary readings:

- (!) Shapiro, S., *Thinking About Mathematics*, Oxford University Press (2000), chapter 5 ('Logicism').
- (!) Frege, G., 'The Concept of Number' in B&P (these are extracts from Frege's book *The Foundations of Arithmetic*).
- (!) Carnap, R., 'The logicist foundations of mathematics', in B&P.
- Copi, I, *The theory of logical types*, Routledge & Keegan, 1971. [Note: this short book is a fantastic introduction to Russell's views – it may be a bit much to read the whole thing for a tutorial, but well worth a look...].
- Russell, B., 'Selections from *Introduction to Mathematical Philosophy*', in B&P.
- Field, H., 'Is mathematical knowledge just logical knowledge?', *Philosophical Review* 93 (1984), pp. 509-52.

Background reading (optional but potentially very helpful!):

- Heck, R., 'An introduction to Frege's Theorem', *Harvard Review of Philosophy* VII (1999).
- Kenny, A. *Frege*, Blackwell (2000), chapter 5.

Essay Questions: What is the logicist view? What is Frege's version of Logicism, and how does it differ from Russell's? What are the implications of Russell's paradox to logicism? What are some problems with the logicist theory in general? Is logicism ultimately plausible?