



Philosophy of Mathematics

2004/2005; 2nd Semester
dr Benedikt Löwe

Homework Set # 3.

Deadline: May 11th, 2005

Reminder. Homework sets will be graded on a scale of **excellent** (15-13) / **good** (12-10) / **OK** (9-7) / **not OK** (6-0) basis. The answer to a “discuss” question must be less than one page and will be graded based on correctness and style of writing. The answer to a “paraphrase” question must be as short as possible without leaving out anything important and will be graded based on style of writing, correctness (including grammar and spelling), conciseness (the shorter the better) and completeness.

Question 5 (15 points).

Paraphrase Rosen’s review on Maddy’s book.

Gideon **Rosen**, Review of *Naturalism in mathematics* by P. Maddy, **British Journal of Philosophy of Science** 50 (1999), p. 467-474.

You can find the paper on the course webpage and a limited number of print-outs in the envelope at my office door (P3.19).

Hint. It may be easier to wait with the paraphrase until after the presentation on Naturalism (May 4th).

Question 6 (15 points).

Discuss the following statement:

“The question ‘Why is mathematics so useful in science?’ is difficult for realists-in-ontology, in particular if they maintain that mathematical objects have no causal relation to the physical world. Quine’s *Indispensability* approach is a strategy to make realism invulnerable to this question by turning it into an answer.”