

Homework #7. Due: Thurs 11/2

1. What is a countable set? What is an uncountable set?
2. What does the Löwenheim-Skolem Theorem say about the language of ZF formal set theory? How does this generate the Skolem Paradox?
3. Explain in your own words the formal resolution of the Skolem Paradox.
4. In what sense does the formal resolution of the Skolem Paradox suggest a relative concept of infinity?
5. What is the significance of a "recursively axiomatizable formal system"? What does Gödel's 1st Incompleteness theorem say about such systems?