Opgaven Week 4

September 30, 2004

Opgave 1

This exercise refers to the proof of interpolation for **GL** from Boolos. Do there exist sets that are inseperable and inconsistent? If so, expose one, if not, prove that they can not exist.

Opgave 2

This question refers to Chapter 1 of Smullyan. It is likely to expect that for $\phi \in \mathcal{S}$ we have that $\phi(n) = \phi$. Where is this used in the text?

Opgave 3

This question also refers to Chapter 1 of Smullyan. Is it necessarily the case that $n \neq m \rightarrow d(n) \neq d(m)$? If not, provide a necessary condition.

Opgave 4

Make exercise 6 on Page 12.

Opgave 5

Make exercise 2 on Page 12.

Opgave 6

Make exercise 3 on Page 12.