SF2736, Discrete mathematics, autumn 2015 Thu12 November

Eighth lecture

• Remainder

 $|A| < |\mathcal{P}(A)| ext{ for all sets } A$  $leph_0 < leph_1 < leph_2 < \ldots$ 

• Induction and recursion

Strong induction

Well-founded relations

 $\mathcal{R}$ -induction and  $\mathcal{R}$ -recursion

•  $\mathcal{O}$ , the ordinals

Informally

## Properties

Ordinals and well-orders

Cardinals