#3b old exam is so hard, wont be here

Definition

F: X->Y injective or surjective. Exactly what is in notes

A union B, A intersection B

We define the union of A, B belongs to X, to be A U B = {x belongs to X| x belongs to A or x belongs to B}

T F

Exactly the result in the notes

Power sets 2^cardinality

Directly from HW

Completely trivial

Similar to the result in the notes

No functions or intersections and unions in 3-6

Logic

Logical equivalence

Tautology

Induction

Explicit formula

Involves the basic geometry

Pigeon hole, explicit and geometric (distance of points R^2)

Slightly easier than A

Counting

Binomial theory and coefficient, formula to verify

Geometric counting