

Problem 1, part 2

Prove your answer for column C of the previous table.

Problem 1, part 3

Explain why there are $\epsilon > 0$ in D so that $\|f(x) - f(y)\| = \epsilon$ and $\|x - y\| = \delta$.

Problem 1, part 4

Explain why there are $<$ in

Problem 1, part 5

Explain why if $a < b$ are the two least members of D , then $a < b$.

Problem 3

True or false?

*For every countable transitive model M of $ZFC - P$,
 $\frac{1}{2}$ formulas are downward absolute from V to M .*

Explain your answer.

Problem 5

Assume μ is a strongly inaccessible cardinal and $\langle F_\alpha \mid \alpha < \mu \rangle$ is a sequence with the following properties:

1) For every $\alpha < \mu$,

$$|F_\alpha| \leq \alpha.$$

2) For every $X \subseteq \mu$, there is a club $C \subseteq \mu$ such that, for every $\alpha \in C$,

$$X \cap \alpha \in F_\alpha.$$

Prove that μ is not a measurable cardinal.

Problem 6

Assume that μ is a measurable cardinal. Let S

Problem 7

True or false? Explain your answer.

If α is an ordinal such that V_α is a model of ZF, then α is uncountable.