

Good Student vs. Good Researcher - LMW2024

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February 23, 2024

Good students vs. Good researchers

The Good Student

gives the right answers,
doesn't make incorrect claims

The Good Researcher

makes claims which at first may be incorrect,
improves the claims over and over
until he/she finds an interesting theorem

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Handwritten mathematical notes on a light gray background. The notes include various mathematical expressions and logical statements. At the top, there are some definitions or assumptions involving sets and functions. A central part of the notes is enclosed in a hand-drawn box and contains a definition of a function. Below this, there are several lines of text and mathematical symbols, including "Claim 1" and "Claim 2", which compare different logical forms. The bottom part of the notes discusses a property of a class C and asks a question about the theory of (N, E_n) .

Handwritten notes:

- Top left: $\emptyset \neq A \subseteq B \subseteq C \subseteq D$
- Top middle: $f: X \rightarrow Y, g: Y \rightarrow Z, h: Z \rightarrow W$
- Top right: $f \circ g \circ h$
- Middle left (boxed): $f: X \rightarrow Y, g: Y \rightarrow Z, h: Z \rightarrow W$
- Middle right: $\forall x \exists y \exists z (y \in x \wedge x \in y)$
- Bottom left: $\text{Claim 1: } \forall x \exists y \forall z (z \in x \rightarrow \exists y (z \in y))$
- Bottom middle: $\forall x \exists y \forall z (x \in y \rightarrow \dots)$
- Bottom right: $ZF + \text{If } C \in \text{Ord, prop. class, } \rightarrow C = \text{Ord}$
- Bottom right: Question What is the theory of (N, E_n) ?

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his/her merits are not necessarily rewarded