Quiz 8, October 27

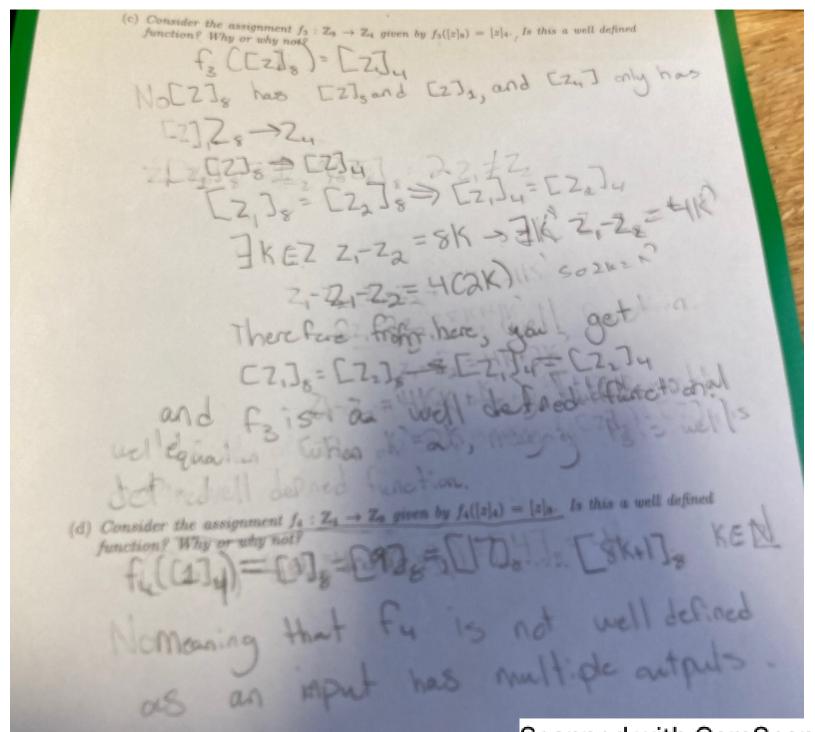
Question. (a) Consider the assignment $f_1: \mathbb{Z} \to \mathbb{Z}_4$ given by $f_1(z) = [z]_4$. Is this a well defined function? Why or why not? $f_1(\mathbb{Z}) = [\mathbb{Z}]_4$ Cach $\mathbb{Z} \in \mathbb{Z}$ can only be defined in one equivalence class, meaning each $f_1(\mathbb{Z})$ is mapped to only one equivalence class, Making it well defined.

(b) Consider the assignment $f_2: \mathbb{Z}_4 \to \mathbb{Z}$ given by $f_2([z]_4) = z$. Is this a well defined function? Why or why not?

Fig. (ISO) A) the well defined, as [Z] the can map the same Z to multiple places as the equivalence the same Z to multiple places as the equivalence class can report.

Class can report.

Using ex.) from class, [Z] from a-b=HK, broad Using ex.) from class, [Z] the form a beautiful the work which is infinitely contain all integers with remainder two which is infinitely contain all integers with remainder two which is infinitely contain all integers.



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