Math 160B - Winter 2022 - Class Work - In Lecture, February 24

Name:

PID:

1. [Tarski's Undefinability of Truth.] Let $\mathcal{N} = (\mathbb{N}, 0, S, +, \cdot)$. Suppose there is an L_{PA}-formula $T(x)$ so that $T(\ulcorner A \urcorner)$ is true in the integers if and only if $\mathcal{N} \models A$. Show that this leads to a contradiction. ("T" stands for "true".)