Marcin Sarnecki 323034 quiz #7

[illegible]

Pytanie 2

$$\neg(\exists z\,((\exists x\; x\in X \wedge x\leq z) \wedge x_0 \leq z)) \equiv$$

$$\equiv \forall z\,\neg((\exists x\; x\in X \wedge x\leq z) \wedge x_0 \leq z) \equiv$$

$$\equiv \forall z\;\; \neg(\exists x\, x\in X \wedge x\leq z) \vee \neg(x_0 \leq z) \equiv$$

$$\equiv \forall z\;\; \forall x\,\neg(x\in X \wedge x\leq z) \vee x_0 > z \equiv$$

$$\equiv \forall z\,\forall x\;\; x\notin X \vee x > z \vee x_0 > z$$