

Start Time:

Your name:

Stop Time:

Integrity signature:

Time limit 15 minutes, not counting download and upload. Please add explanation if over 20 minutes.

1. Let the language L have only the symbol $=$ and no non-logical symbols.

Let $\Gamma = \emptyset$ (the emptyset). Let Π be $\{AtLeast_k : k \geq 2\}$.

- (a) Show Γ is not complete, by giving an example of a sentence A such that $\Gamma \not\models A$ and $\Gamma \not\models \neg A$.
- (b) Show that Π is \aleph_0 -categorical.
- (c) Prove that Π is complete.