

LGIC 010 & PHIL 005
Definitions for Practice Final Examination
Spring Term, 2017

- $[n] = \{1, \dots, n\}$.
- $\text{mod}(S, n) = \{A \mid A \models S \text{ and } U^A = [n]\}$.
- $A \cong B$ if and only if A is *isomorphic* to B .
- A list l of structures is *succinct* if and only if for every pair of distinct structures A and B appearing on l , $A \not\cong B$.
- $\text{Aut}(A) = \{h \mid h \text{ is an automorphism of } A\}$.
- $\text{orb}(a, A) = \{h(a) \mid h \in \text{Aut}(A)\}$.
- $\text{Orbs}(A) = \{O \mid \text{for some } a \in U^A, O = \text{orb}(a, A)\}$.
- Let $S(x)$ be a schema with a single free variable x and A a structure.

$$S[A] = \{a \in U^A \mid A \models S[x|a]\}.$$

- \mathbb{Z}^+ is the set of positive integers $\{1, 2, 3, \dots\}$.