

	Relating first-order monadic omega-logic, propositional linear-time temporal logic, propositional generalized definitional reflection logic and propositional infinitary logic
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	The relationship among first-order monadic omega-logic (MOL), propositional (until-free) linear-time temporal logic (LTL), propositional generalized definitional reflection logic (GDRL) and propositional infinitary logic (IL) is clarified via embedding theorems. A theorem for embedding a Gentzen-type sequent calculus \mathcal{MO} for MOL into a Gentzen-type sequent calculus \mathcal{LT} for LTL is proved. The cut-elimination theorem for \mathcal{MO} is proved using this embedding theorem. MOL is also shown to be decidable through the use of this embedding theorem. Theorems for embedding \mathcal{LT} into \mathcal{MO} and \mathcal{MO} into a Gentzen-type sequent calculus \mathcal{LK} for IL are also proved. Moreover, a theorem for embedding \mathcal{MO} into a Gentzen-type sequent calculus \mathcal{GD} for GDRL and a theorem for embedding \mathcal{LT} into \mathcal{GD} are proved.