Admitted 🡪 x Denied 🡪 -

**Every … is** 🡪 all

**Subclass** 🡪 all

**Subproperty** (subroles) 🡪 not **ALC** nor **EL** because they don’t have subroles (role hierarchy)

**Disjoint** 🡪

* Not possible in **EL** and in **RDFS** because they do not admit a negation
* Not **Datalog**

**Has domain … range** (inverse role) 🡪

* Not possible **EL** because it does not admit inverse role

ALC does not have inverse role, but we can rewrite it in a universal constructor <for all>, so we can do it in ALC

RTFS can use it through range

**Existence** (unqualified existential restriction) 🡪

Datalogs ( and with Constraints), ASP, RL Yes, except if I have the Existence relation on the Left and a CONCEPT (entità) on the Right

**At least + characteristics** (qualified existential restriction) 🡪

* not **DL-Lite\_R** nor **RDFS** because cannot have conjunction and also qualified existential restriction is not possible

Datalogs (and with Constraints), ASP, RL Yes, except if I have the Existence relation on the Left and a CONCEPT (entità) on the Right

**Also / Everyone … both / and** **both** (conjunction) 🡪

* not **DL-Lite\_R** nor **RDFS** because cannot have conjunction

**every … at least … one …** (cardinality) 🡪

* not **ALC** nor **ASP** nor **EL**
* not **RL** because cannot have atomic concept expression in right side of the formula that are different from atomic concept.
* Not **Datalog,** not **Datalog with constraints** with constraints and ASP because it violates the safeness condition.
* Not **DL\_Lite\_R** nor **RDFS** because can’t have conjunction and also qualified existential restriction is not possible