First-order resolution

Factoring

- Given a clause: $\{\rho_1, \rho_2\} \cup C$.
- For any θ such that $\rho_1\theta = \rho_2\theta$, can infer $\{\rho_1\theta\} \cup C\theta$.
  (ρ_1 unifies ρ_2 and θ is the unifier of the two literals)

Example:

- Given $[P(x, a), P(b, y), Q(x, y)]$.
- For $\theta = \{x/b, y/a\}$, $P(x, a)\theta = P(b, a) = P(b, y)\theta$.
- Infer $[P(b, a), Q(b, a)]$.