

Exercises for the Resolution part of 'L&C'

Exercise R1:

Find all Robinson-resolvents of $C = p(x, f(x)) \vee p(a, y)$ and $D = \neg p(x, y) \vee \neg p(a, f(x)) \vee \neg p(f(x), f(y))$.

Specify all used renamings, mgus and (implicit) factors.

Exercise R2:

Prove that subsumed Robinson-resolvents can be discarded without sacrificing refutational completeness.

Exercise R3:

Describe another resolution refinement (other than ordered resolution) in detail. (You don't have to give a completeness proof).

Submission of solutions (for all exercises of units 7/8/9/10):

- **Deadline:** December 1, 2012
- Send as **PDF** to chrisf@logic.at (preferably all solutions in one file!)
- Use **subject line:** "L&C exercises"
- Include your **name** and **Matrikelnr.** in the PDF
- resend/inquire, if you don't receive an acknowledgment within 3 days