

Automated Reasoning, WS 2013. Homework 3, given Dec 2, due Dec 11

From the book by Chang and Lee:

page 42, ex. 3, ex. 6 (a, b);

page 43, ex. 9 (1, 2);

page 67, ex. 1: (b);

page 69, ex. 15;

page 98, ex. 6: (1, 3, 5), ex. 8 (1).

Prove unsatisfiability by resolution:

(1) $\{\neg P(x) \vee Q(f(x, x)), P(g(b)), \neg Q(f(g(b)), g(b))\}$

(2) $\{P(x), Q(x, f(x)) \vee \neg P(x), \neg Q(g(y), z)\}$