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Contents

$\{\neg p(x, y), r(x, y), q(x), \neg p(y, x)\}$ 1
 $\{\neg r(x, y), \neg q(y), r(y, x)\}$ 2
 $\{r(x, y), \neg q(x), \neg q(y)\}$ 3
 $\{p(a, b)\}$ 4
 $\{p(b, a)\}$ 5
 $\{\neg r(a, b)\}$ 6
 $\{r(a, b), q(a)\}$ 7 from Clause 1 (with 4 and 5)
 $\{r(b, a), q(b)\}$ 8 Clause 1 (with 4 and 5) and clause 6 then gives us
 $\{q(a)\}$ 9 resolve with 2 to get
 $\neg r(b, a), r(a, b)$ 10
 $r(a, a)$ 11 from 3 and 9

References