

Answers to Queries Exercise Solutions

Suppose a program has the following answer sets:

$$\begin{aligned}A_1 &= \{p(a), p(b), q(b), \neg s(a)\} \\A_2 &= \{q(b), r(a), \neg s(a)\}\end{aligned}$$

How would it answer the following queries?

1. $s(a)$ — No
2. $r(a)$ — Unknown
3. $\neg s(b)$ — Unknown
4. $q(b) \wedge \neg s(a)$ — Yes
5. $q(b) \wedge p(a)$ — Unknown
6. $\neg q(b) \wedge p(a)$ — No
7. $p(a) \vee r(a)$ — Yes
8. $\neg p(a) \vee \neg s(a)$ — Yes
9. $p(a) \vee p(b)$ — Unknown
10. $\neg q(b) \vee s(a)$ — No