Answers to Queries Exercises

Suppose a program has the following answer sets:

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

How would it answer the following queries?

1. $s(a)$

2. $r(a)$

3. $\neg s(b)$

4. $q(b) \wedge \neg s(a)$

5. $q(b) \wedge p(a)$

6. $\neg q(b) \wedge p(a)$

7. $p(a) \vee r(a)$

8. $\neg p(a) \vee \neg s(a)$

9. $p(a) \vee p(b)$

10. $\neg q(b) \vee s(a)$