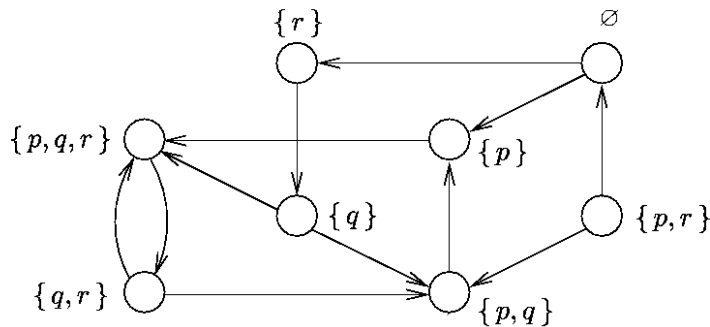


### Exercises for “Formal Specification and Verification” Exercise sheet 8

#### Exercise 8.1:

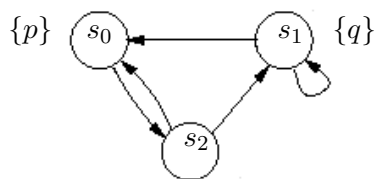
Consider the following transition system:



Compute  $\text{sat}(E(\top\mathcal{U}((p \leftrightarrow r) \wedge (p \not\leftrightarrow q))))$ .

#### Exercise 8.2:

Consider the following transition system:



Apply the algorithm presented in the lecture – using OBDDs in the ordering  $[p, q]$  to represent sets of states and transitions – to compute the set of states of this transition system which satisfy  $E(q\mathcal{U}p)$ .

Please submit your solution until Wednesday, July 4, 2012 at 11:00. Submission possibilities:

- By e-mail to [sofronie@uni-koblenz.de](mailto:sofronie@uni-koblenz.de) with the keyword “Homework FSV” in the subject.
- Hand it in to me (Room B225) or drop it in the box in front of Room B224.