

# Assessed Coursework: Systems Verification

Ioannis Kassinopoulos

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## Question 1

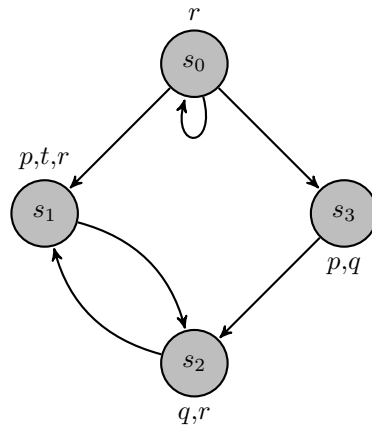


Figure 1: The transition system  $\mathcal{M}_1$ .

## Infinite Tree

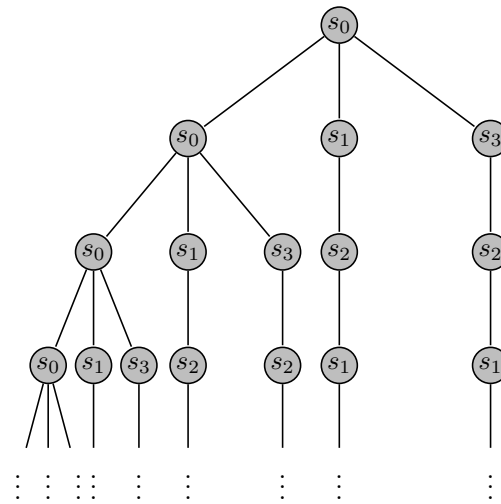


Figure 2: Unwinding the system described by  $\mathcal{M}_1$  as an infinite tree of all computation paths beginning in  $s_0$  (the first layer).

## Satisfiability

## Question 2

### Question 3

### Question 4