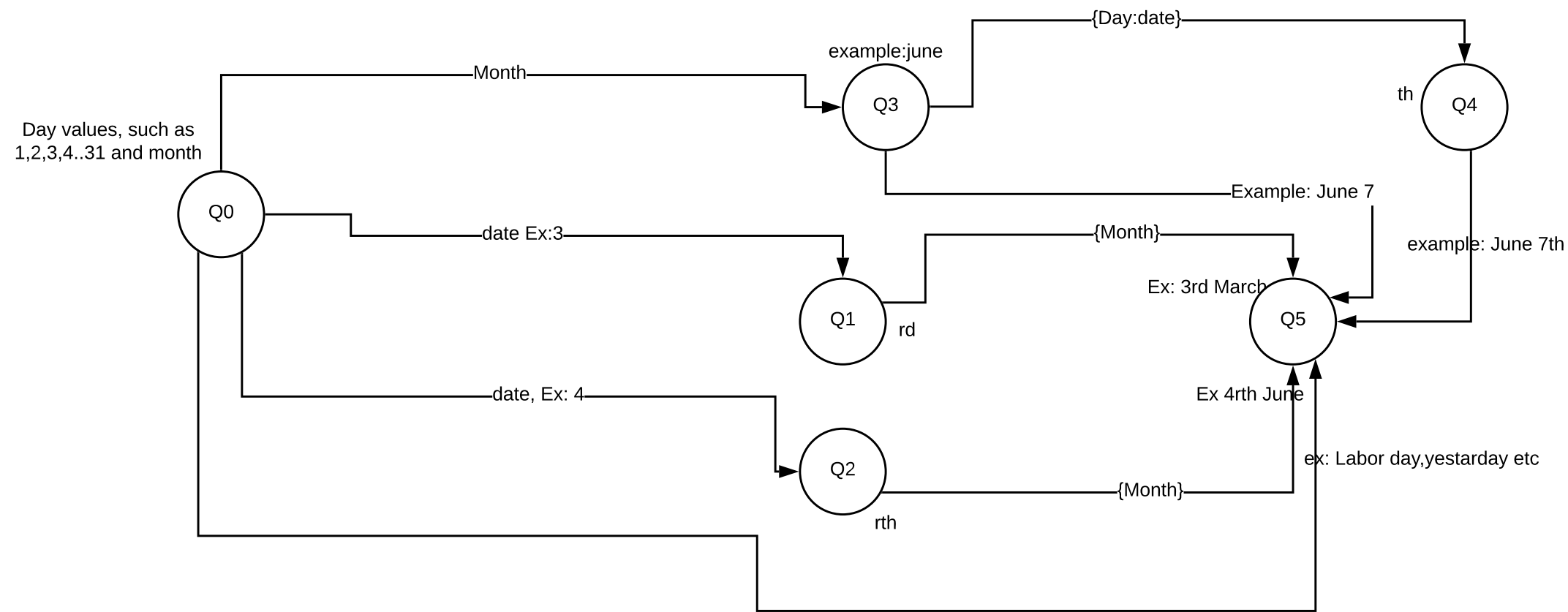
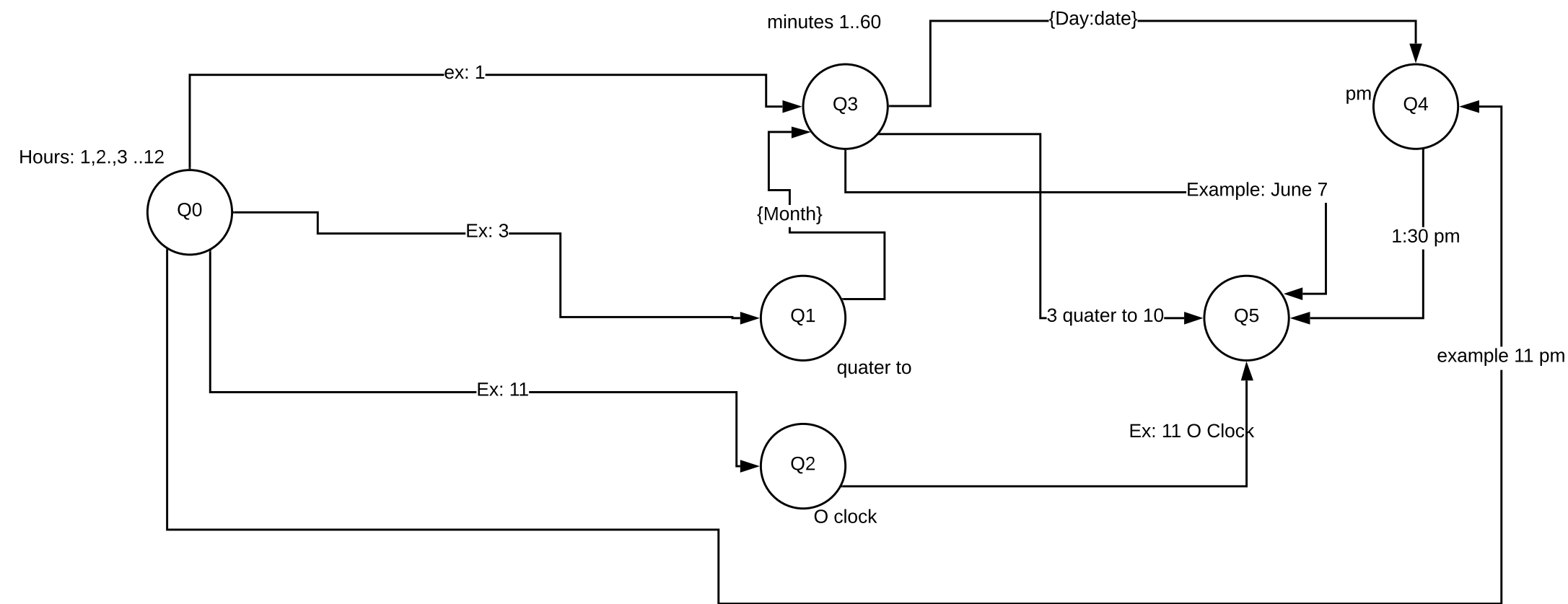


1. Design an FSA that recognizes simple date expressions, like *June 7*, *the 3rd of October*, and *Labor Day*. You should try to include all such "absolute" dates (not ones relative to the current date, like *yesterday*). Each edge of the graph should have a word or a set of words on it. You should use some short of shorthand for classes of words to avoid drawing too many arcs (e.g clothing -> shirt, pants, socks).



2. Write an FSA for time-of-day expressions like eleven o'clock, twelve-thirty, midnight, or a quarter to ten, and others.



3. Write a regular expression for the language accepted by the NFSA in figure below.

Ans: I don't know how to solve this.

4. Give examples of each of the noun and verb classes recognized by the FSA found on slide 18 of the [Finite-State Transducers slides](#), and find some exceptions to the rules.

- 1. computerization
- 2. proactiveness
- 3. collectiveness
- 4. fairness
- 5. scarcity

5 . Give examples of each of the noun and verb classes recognized by the FSA found on slide 18 of the [Finite-State Transducers slides](#), and find some exceptions to the rules.

Answer: Whle processing s in q5, if q5 find z,s,x it will send it back to q1 for processing to find a refined s.