1. Draw a transition diagram for a FSM with alphabet {*a*,*b*} that decides language {“*aab*”}.
2. Draw a transition diagram for a FSM with alphabet {*a*,*b*} that decides the set of all strings that begin with *aa*. Number the states and say what Set(*q*) is for each state *q*.
3. Draw a transition diagram for a FSM with alphabet {*a*,*b*} that decides the set of all strings that end on *aa*. Number the states and say what Set(*q*) is for each state *q*.
4. Write a regular expression that describes the language of the preceding problem.
5. Draw a transition diagram for a FSM with alphabet {*a*,*b*} that decides the set of all strings that contain exactly three *b’*s. Number the states and say what Set(*q*) is for each state *q*.
6. Write a regular expression that describes the language of the preceding problem.