Question 6:

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Question 7:

We just have to move one head of the Turing machine to the middle to see if it's alive or dead. Then use the second head to count how many born cells there are other than the middle one. We count using states q0, q1, q2, q3, q4 where qi means that i be alive. and then at the end, if middle cell is born and we are in q2 or q4, the answer is BORN if middle cell is dead and we are in q2 or q3, the answer is BORN otherwise, answer is DEAD.

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Question 8:

We just repeat the above logic (in question 7) but using 1 head, and the way to do it: just double the states: first move the head to the middle, if it's born, then we will stay within a set of states (q0, born), (q1, born), (q2, born), (q3, born) and (q4, born).  
otherwise we will stay in states (q0, dead), (q1, dead), (q2, dead), (q3, dead) and (q4, dead) and we will then move the head to the beginning and just count (transitioning one state higher each time we see a born). When we are done counting, then we know the answer using the same logic mentioned above.