3e7.20

7.205 This can be done algebraically. If all of the input combinations are covered, the logical sum of the expressions on all the transitions leaving a state must be 1. If the sum is not 1, it is 0 for all input combinations that are uncovered. For double-covered input combinations, we look at all possible pairs of transitions leaving a state. The product of a pair of transition equations is 1 for any double-covered input combinations.

(a) State D, Y = 0 is uncovered.

(b) State A, (X+Z′) = 0 is uncovered. State B, W = 1 is double-covered; (W+X) = 0 is uncovered. State C, (W+X+Y+Z) = 0 is uncovered; (W·X + W·Y + Z·Y + Z·X) = 1 is double covered. State D, (X·Y + ·X′·Z + W·Z) = 0 is uncovered; (W·X′·Z + W·X·Y·Z) = 1 is double-covered;