Textbook problems listed are from the text by West.

Question 1: Textbook 1.2.4.

Question 2: Textbook 1.2.5.

Question 3: Textbook 1.2.7.

Question 4: Textbook 1.2.8.

Question 5: Let W be a closed walk of length at least 1. Prove that if W does not contain a cycle, then some edge of W repeats immediately (once in each direction). Hint: prove the contrapositive by induction.

Question 6: Textbook 1.2.20.

Question 7: Textbook 1.2.26.

Question 8: Textbook 1.2.38.

Question 9: Four knights are placed at the corners of a 3x3 chessboard as in the image below. Is it possible to, by a sequence of valid chess moves, move the pieces so that the two black knights are in adjacent corners and the two white knights are also in adjacent corners (for example, black a3 and c3, white a1 and c1)? Prove your answer.