Reductions via Computational Histories

Question 1. What is the computational history of a Turing Machine? What are accepting or rejecting computational histories?

Question 2. How is a Linear Bounded Automata like a Turing Machine? How is it different?

Question 3. Let M be an LBA with q states, g symbols in tape alphabet, and a tape length of n. Show that M has qng^n distinct configurations

Question 4. Show that $A_{LBA} = \{\langle M, w\rangle : M \text{ is an LBA that accepts string } w\}$ **is** decidable

Question 5. Show that $E_{LBA} = \{\langle M\rangle : M \text{ is an LBA where } L(M) = \emptyset\}$ is undecidable