

Math 3342 Homework #3 extra problems

For each of these languages, draw a DFA that accepts that language, and then prove that your DFA accepts that language.

Question 1. $\{ba^n b \mid n \in \mathbb{N}\}$

Question 2. $\{aax \mid x \in \{a, b\}^*\}$

Question 3. $\{a^n b^m\}$

(For this one, you need to use induction twice- first with n and then with m . I would suggest writing a lemma about the n part first.)