For each of the following languages, show whether it is a “regular language”.

1. \( \{a^ib^j : 0 \leq i \leq j \leq 2000 \} \)
2. \( \{x \in \{a, b\}^* : x = x^R \} \)
3. \( \{x \in \{a, b\}^* : x \text{ contains at least 2 'a's and at most 2 'b's} \} \)
4. \( \{x \in \{a, b\}^* \text{ with an even number of a's and an even number of b's.} \} \)
5. \( \{x \in \{0, 1\}^* \text{ with the property that, if the string is viewed as an integer, I, represented in binary, that I mod 13 = 6} \} \)
6. \( \{x \in \{0, 1\}^* \text{ with the property that, if the string is viewed as an integer, I, represented in binary, that I is a power of 64} \} \)