For each language $L$ below, give a DFA $A$ that accepts $L$ (i.e., such that $L = L(A)$). Justify briefly that each of your DFAs is correct — do not write formal proofs; instead, explain which strings end up at each state and use this to justify that your DFA accepts every string in $L$ but no string outside of $L$.

1. $L_1 = \{s \in \{0, 1\}^* : \text{the integer value represented by } s \text{ in binary is a multiple of } 4 \}$.
2. $L_2 = \{s \in \{a, b, c\}^* : s \text{ does not begin with } “abc” \}$.
3. $L_3 = \{s \in \{\triangle, \square\}^* : s \text{ contains both } “\triangle\triangle” \text{ and } “\square\square” \text{ as substrings} \}$. 