

10 pts

Using cookies as states and icing to draw transitions and rings on the states (one ring is nonfinal state and two rings are final state), create an edible DFA for one of the following languages. Your group will be assigned to one of these.

Before attempting the DFA write down at least five strings in the language and five strings not in the language. Get your lists checked by Prof. Rodger. **YOU WILL TURN IN THIS SHEET** with your group number and your names.

After building your DFA, get it checked off before you eat it.

1. $\Sigma = \{a, b\}$ (L) = $\{w \in \Sigma^* \mid w \text{ has an even number of } a\text{'s and there can be no more than three consecutive } b\text{'s}\}$.
2. $\Sigma = \{a, b\}$ (L) = $\{w \in \Sigma^* \mid w \text{ has no more than three consecutive } a\text{'s and no more than three consecutive } b\text{'s}\}$.