Name:
Directions: Show all work. No credit for answers without work.

1. [4 points] Give a 4 -state NFA for the language $\{w \mid w$ ends with 000$\}$.
2. [3 points] Let $\Sigma=\{0,1\}$. Give a DFA for the language $\{w \mid w=x 1010 y$ for some strings $x$ and $y\}$. (Another way to describe this language is that it is the set of all words that contain 1010 as a substring.)
3. [3 points] Convert the following NFA to a DFA.

