Section 2.1

(1) 0001, 01001 are accepted. 0000110 is not.

(2)

(a) 

(b) 

(c) 

(d) 

(6) $L(M) = \{ b^n a b^m : n, m \geq 0 \} \cup \{ b^n a b^m a w b : n, m \geq 0, w \in \{a,b\}^* \} = \text{the set of all strings } w \in \{a,b\}^* \text{ such that } w \text{ has at least one } a, \text{ and if } w \text{ has more than one } a, \text{ then } w \text{ ends with a } b.$

(7)

(a) 

(b) 

(c) 

(d) 

(e) 

We did this in class.
These two take up too much space. I'll do them in class.