

DFA Pictionary Challenge

$$\Sigma = \{1, 0\}$$

$$L = \{b \in \Sigma^* : b \text{ ends with } 1\}$$

Regular expression: $(0|1)^*1$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{a, b\}$$

$$L = \{s \in \Sigma^* : s \text{ has even number of 'b's}\}$$

Regular expression: $a^*ba^*(ba^*ba^*)^*$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{a, b\}$$

$$L = \{s \in \Sigma^* : s \text{ has at least two 'a's'}\}$$

Regular expression: $b^*ab^*ab^*(a|b)^*$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{a, b\}$$

$$L = \{s \in \Sigma^* : s \text{ contains substring 'aba'}\}$$

Regular expression: $(a|b)^*aba(a|b)^*$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{3, 7, 6\}$$

$$L = \{s \in \Sigma^* : s \text{ is a string of length } 3\}$$

Regular expression: $(3|7|6)(3|7|6)(3|7|6)$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{0, 1\}$$

$$L = \{b \in \Sigma^* : b \text{ is the binary representation of an even number}\}$$

Regular expression: $(0|1)^*0$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary Challenge

$$\Sigma = \{1, 0\}$$

$$L = \{b \in \Sigma^* : b \text{ ends with } 1\}$$

Regular expression: $(0|1)^*1$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{a, b\}$$

$$L = \{s \in \Sigma^* : s \text{ has even number of 'b's}\}$$

Regular expression: $a^*ba^*(ba^*ba^*)^*$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary Challenge

$$\Sigma = \{a, b\}$$

$$L = \{s \in \Sigma^* : s \text{ has at least two 'a's}\}$$

Regular expression: $b^*ab^*ab^*(a|b)^*$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{a, b\}$$

$$L = \{s \in \Sigma^* : s \text{ contains substring 'aba'}\}$$

Regular expression: $(a|b)^*aba(a|b)^*$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{3, 7, 6\}$$

$$L = \{s \in \Sigma^* : s \text{ is a string of length } 3\}$$

Regular expression: $(3|7|6)(3|7|6)(3|7|6)$

Don't forget to indicate the start state and accept state(s)!

DFA Pictionary
Challenge

$$\Sigma = \{0, 1\}$$

$$L = \{b \in \Sigma^* : b \text{ is the binary representation of an even number}\}$$

Regular expression: $(0|1)^*0$

Don't forget to indicate the start state and accept state(s)!