

# Exercises on Chapter 4

Beau De Clercq

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## Ex. 4.1

### Question

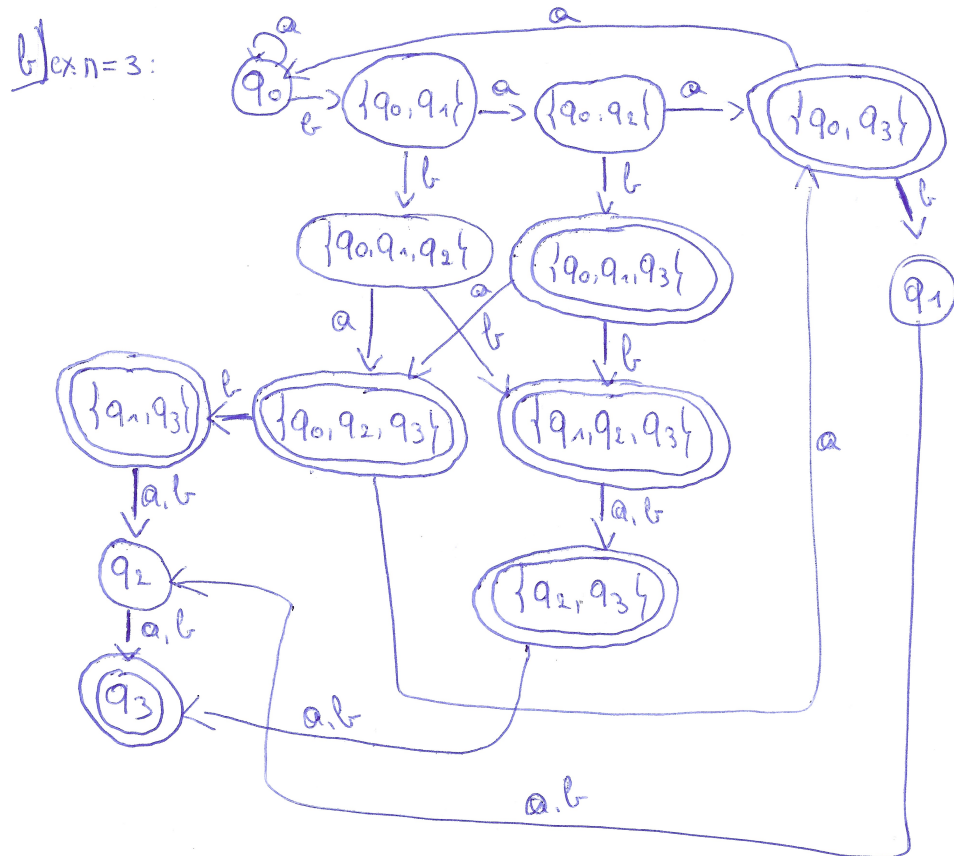
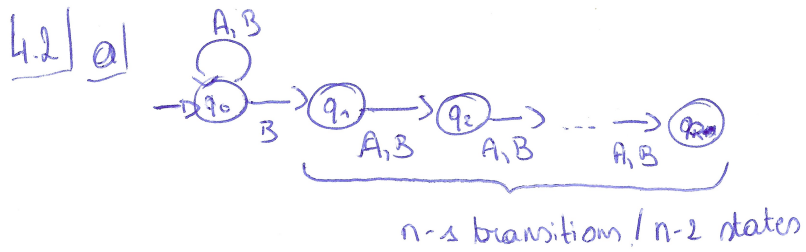
### Answer

- $\text{BadPref}(P_1) = ((\neg a)^* ab^* (a)^+ c^?)^\omega$
- $\text{BadPref}(P_2) = ((\neg a)^* a (\neg b)^* a)^\omega$
- Not possible: counting is not possible.
- $\text{BadPref}(P_4) = ((a \wedge \neg b)(b \wedge \neg a))^* (b \vee a)$

## Ex. 4.2

### Question

### Answer





**Ex. 4.5**

**Question**

**Answer**

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## Ex. 4.12

### Question

### Answer

$$L = ( \quad \begin{array}{l} ((A(A \vee B \vee C)^*A)^* \vee (C(A \vee B \vee C \vee)^*C)^*)^* \\ ((B \vee C)^*(A((BC)^* \vee (BA^*)))) \end{array} )^{\omega}$$

### Ex. 4.13

Question

Answer

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**Ex. 4.14**

**Question**

**Answer**

**Ex. 4.15**

**Question**

**Answer**



**Ex. 4.16**

**Question**

**Answer**

**Ex. 4.17**

**Question**

**Answer**

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