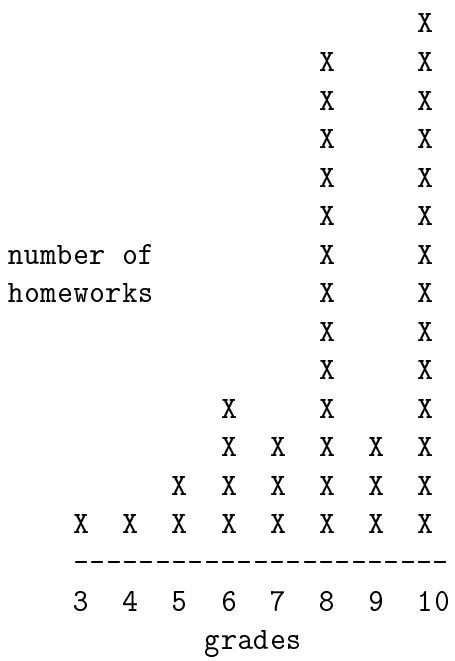
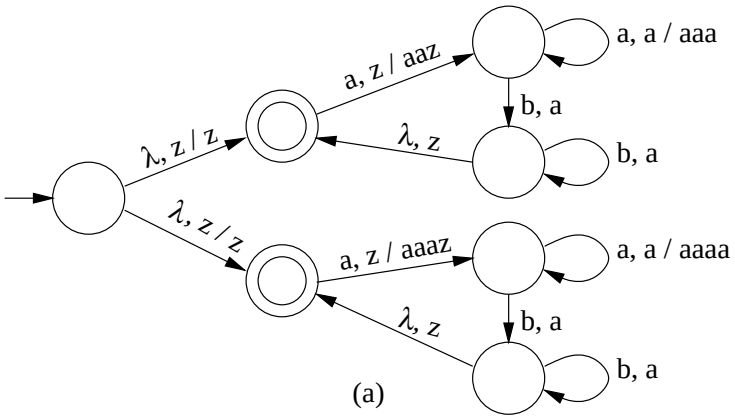
Automata Theory: Solutions 10

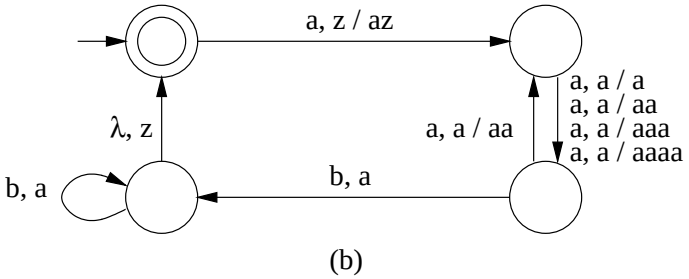


Problem 1
Construct nondeterministic PDAs for the following languages:

(a) $\{a^n b^{2\cdot n}, a^n b^{3\cdot n} : \ n \geq 0\}$
(b) $\{a^{2\cdot n} b^m : \ n \leq m \leq 4 \cdot n\}$

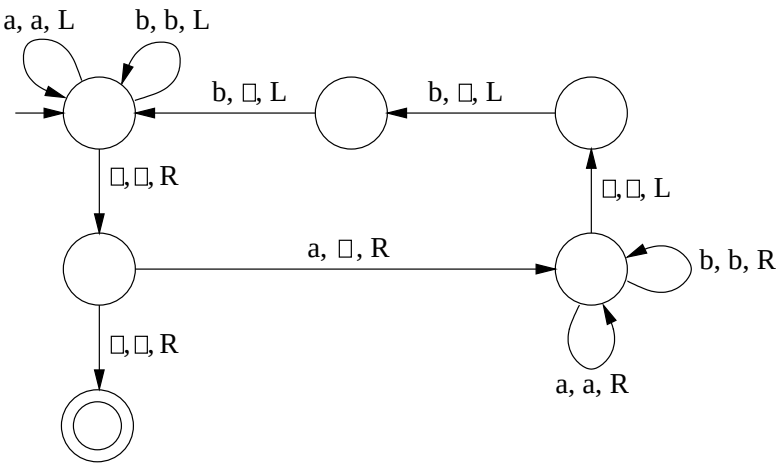


(a)



(b)

Problem 2

Construct a Turing machine that accepts the following language:

$$\{a^n b^{2 \cdot n} : \ n \geq 0\}$$