Example: Removing useless symbols

$S \rightarrow Aa$

$S \rightarrow AC$

$A \rightarrow a$

$C \rightarrow EC$

$E \rightarrow b$

Example: Removing ϵ productions

$S \rightarrow AB$
$B \rightarrow b$
$A \rightarrow CDa$
$A \rightarrow CC$
$C \rightarrow \epsilon$
$C \rightarrow a$
$D \rightarrow AC$

Example: Removing unit productions

$S \rightarrow A$
$S \rightarrow AB$
$A \rightarrow b$
$A \rightarrow B$
$B \rightarrow c$
$A \rightarrow ab$
$B \rightarrow b$