

$$\begin{aligned}
& (A \vee \bar{C}) \overline{\bar{C} \vee BE} \vee (CD \vee \bar{A}E) \overline{\bar{B} \vee \bar{C}} = (A \vee \bar{C}) \bar{C} \bar{B} \bar{E} \vee (CD \vee \bar{A}E) \bar{B} \bar{C} = \\
& = (\bar{A} \bar{C} \vee \bar{C} \bar{C}) (\bar{B} \vee \bar{E}) \vee (\bar{B} \bar{C} CD \vee \bar{A} \bar{B} \bar{C} E) = (\bar{A} \bar{C} \vee \bar{C}) (\bar{B} \vee \bar{E}) \vee (0 \vee \bar{A} \bar{B} \bar{C} E) = \\
& = \bar{C} (\bar{B} \vee \bar{E}) \vee \bar{A} \bar{B} \bar{C} E = \bar{B} \bar{C} \vee \bar{C} \bar{E} \vee \bar{A} \bar{B} \bar{C} E = (\bar{B} \bar{C} \vee \bar{B} \bar{C} \bar{A} E) \vee \bar{C} \bar{E} = \bar{B} \bar{C} \vee \bar{C} \bar{E} = \bar{C} (\bar{B} \vee \bar{E})
\end{aligned}$$