a)
$$\overline{\overline{ABC} \vee D} \vee \overline{\overline{ACD} \vee B} = \overline{\overline{ABC} \vee D}\,\overline{\overline{ACD} \vee B} =$$
$$= (ABC \vee D)(\overline{ACD} \vee B) = (ABC \vee D)(\overline{A} \vee \overline{C} \vee \overline{D} \vee B) =$$
$$= A\overline{A}BC \vee ABC\overline{C} \vee ABC\overline{D} \vee AB\overline{B}C \vee \overline{A}D \vee \overline{C}D \vee D\overline{D} \vee BD =$$
$$= 0 \vee 0 \vee ABC\overline{D} \vee ABC \vee \overline{A}D \vee \overline{C}D \vee 0 \vee BD = ABC \vee \overline{A}D \vee \overline{C}D \vee BD =$$
$$= ABC \vee \overline{A}D \vee \overline{C}D \vee BD(A \vee \overline{A})(C \vee \overline{C}) =$$
$$= ABC \vee \overline{A}D \vee \overline{C}D \vee ABCD \vee AB\overline{C}D \vee \overline{A}BCD \vee \overline{A}B\overline{C}D =$$
$$= (ABC \vee ABCD) \vee (\overline{A}D \vee \overline{A}BCD \vee \overline{A}B\overline{C}D) \vee (\overline{C}D \vee AB\overline{C}D)$$
$$= ABC \vee \overline{A}D \vee \overline{C}D = ABC \vee (\overline{A} \vee \overline{C})D$$

U ovom zadatku lako se dolazi do izraza $ABC \vee \overline{A}D \vee \overline{C}D \vee BD$, nakon čega se član BD može eliminirati kao u Primjeru 6.9 u udžbeniku, ili ovako kako je demonstrirano ovdje, dvostrukim proširenjem tog člana i apsorpcijom dijelova dobijenih nakon proširenja u druge članove.

b)
$$\overline{\overline{A\overline{B}C} \vee \overline{D}} \vee \overline{\overline{ACD} \vee B} = \overline{\overline{A\overline{B}C} \vee \overline{D}}\,\overline{\overline{ACD} \vee B} =$$
$$= (A\overline{B}C \vee \overline{D})(\overline{ACD} \vee B) = (A\overline{B}C \vee \overline{D})(\overline{A} \vee \overline{C} \vee \overline{D} \vee B) =$$
$$= A\overline{A}\,\overline{B}C \vee A\overline{B}C\overline{C} \vee A\overline{B}C\overline{D} \vee AB\overline{B}C \vee \overline{A}\,\overline{D} \vee \overline{C}\,\overline{D} \vee \overline{D}\overline{D} \vee B\overline{D} =$$
$$= 0 \vee 0 \vee A\overline{B}C\overline{D} \vee 0 \vee \overline{A}\,\overline{D} \vee \overline{C}\,\overline{D} \vee \overline{D} \vee B\overline{D} =$$
$$= A\overline{B}C\overline{D} \vee \overline{A}\,\overline{D} \vee \overline{C}\,\overline{D} \vee \overline{D} \vee B\overline{D} = \overline{D}$$

Ovdje se u posljednjem koraku vidi da član $\overline{D}$ apsorbira u sebe sve ostale članove.

c)
$$\overline{\overline{A\overline{B}\,\overline{C}} \vee D} \vee \overline{\overline{A}CD \vee \overline{B}} = \overline{\overline{A\overline{B}\,\overline{C}} \vee D}\,\overline{\overline{A}CD \vee \overline{B}} =$$
$$= (A\overline{B}\,\overline{C} \vee D)(\overline{A}CD \vee \overline{B}) = A\overline{A}\,\overline{B}C\overline{C}D \vee A\overline{B}\,\overline{B}\,\overline{C} \vee \overline{A}CDD \vee \overline{B}D =$$
$$= 0 \vee A\overline{B}\,\overline{C} \vee \overline{A}CD \vee \overline{B}D = A\overline{B}\,\overline{C} \vee \overline{A}CD \vee \overline{B}D = A\overline{B}\,\overline{C} \vee (\overline{A}C \vee \overline{B})D$$

d)
$$\overline{\overline{A\overline{B}} \vee \overline{C}D} \vee \overline{\overline{A}C \vee \overline{B}D} = \overline{A\overline{B} \vee \overline{C}D}\,\overline{\overline{A}C \vee \overline{B}D} =$$
$$= (A\overline{B} \vee \overline{C}D)(\overline{A}C \vee \overline{B}D) = A\overline{A}\,\overline{B}C \vee A\overline{B}\,\overline{B}D \vee \overline{A}C\overline{C}D \vee \overline{B}\,\overline{C}DD =$$
$$= 0 \vee A\overline{B}D \vee 0 \vee \overline{B}\,\overline{C}D = A\overline{B}D \vee \overline{B}\,\overline{C}D = \overline{B}D(A \vee \overline{C})$$