Plausible Reasoning

← Back to Chapters

Proof of 1.13

if $\overline{B} = AD$ then $A\overline{B} = \overline{B}$:

$\overline{B} = AD$

$A\overline{B} = AAD$

$A\overline{B} = AD$

$A\overline{B} = \overline{B}$

□

if $\overline{B} = AD$ then $B\overline{A} = \overline{A}$:

$\overline{B} = AD$

$A + \overline{B} = A + AD$

$A + \overline{B} = A$ using absorption laws, which can be proved with a truth table

$\overline{A}B = \overline{A}$

□