

### More challenging truth-table exercises

If A, B, C and D are true, and W, X, Y, and Z are false, determine the truth value of the following wffs:

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1)  $(A \supset \sim B) \vee (X \& Z)$  True False

Reset

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2)  $\sim(\sim((A \vee \sim X) \supset \sim(B \& \sim C)))$  True False

Reset

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3)  $((A \supset B) \supset (C \supset D)) \supset (X \supset Z)$  True False

Reset

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4)  $(\sim A \supset B) \vee (X \equiv \sim Z)$  True False

Reset

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5)  $(\sim A \supset \sim B) \equiv (\sim B \supset \sim A)$  True False

Reset

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6)  $\sim((Z \vee (A \vee B)) \& \sim(A \& \sim B))$  True False

Reset

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7)  $(\sim A \equiv \sim(\sim B \& B))$  True False

Reset

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8)  $(A \equiv (B \vee \sim C)) \supset (\sim D \equiv Z)$  True False

Reset

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9)  $Z \& \sim(A \vee \sim A)$  True False

Reset

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10)  $\sim(\sim A \supset \sim B)$  True False

Reset