

ERRORS IN *THE LOGIC BOOK*
(CHAPTER 5)

p. 172

In the derivation on the lower half of the page, read

$A / \sim I$

instead of

$A / \sim E$

on line 2 of the derivation, and

2-__ $\sim I$

instead of

2-__ $\sim E$

on the last line of the derivation.

p. 173

(i) In the derivation at the top of the page, read

$A / \sim I$

instead of

$A / \sim E$

on the second line of the derivation, and

2-__ $\sim I$

instead of

2-__ $\sim E$

on the last line of the derivation.

(ii) Do the same for the second derivation on p. 173.

(iii) In the last derivation on p. 173, read

$A / \sim I$

instead of

$A / \sim E$

on the second line of the derivation.

p. 185

In the derivation that appears on the bottom half of the page, read

5-7 \sim E

instead of

2, 7 \supset E

on line 8 of the derivation, and

10-12 \sim E

instead of

10-12

on line 13 of the derivation.

p. 186

Read

A / \sim E

instead of

A \sim E

on lines 6 and 11 of the derivation.

p. 187

In the derivation at the top of the page, read

Derive: A \supset (B \supset A)

instead of

Derive: A \supset (B \supset C).

p. 188

In derivation *f, line 11 is labeled line 12, line 12 is labeled line 13, etc.

p. 193

In the derivation at the top of the page, read

$$3-5 \sim E$$

instead of

$$3-5 \supset I$$

on line 6 of the derivation.

p. 199

(i) In the derivation at the top of the page, read

$$D \equiv (\sim N \vee A)$$

instead of

$$D \equiv (\sim N \vee L)$$

on line 5 of the derivation, and

$$(\sim N \vee A)$$

instead of

$$(\sim N \vee L)$$

on the first of the lines labeled 'G'.

(ii) Also, in the first and second sentences of the text that appears just below this derivation, replace the occurrences of 'L' with 'A'.

(iii) In the second derivation that appears on the page, read

$$D \equiv (\sim N \vee A)$$

instead of

$$D \equiv (\sim N \vee L)$$

on line 5 of the derivation, and

$$(\sim N \vee A)$$

instead of

$$(\sim N \vee L)$$

on line 6 of the derivation.

p. 205

The derivation appearing on the top half of this page should appear as follows (and not as it appears in *The Logic Book*):

11	$\sim A \ \& \ \sim B$			
12	$A \vee B$			$A / \equiv I$
13	A			$A / \sim I$
G	B			$A / \vee E$
G	B			$A / \vee E$
G	B			$12, 13- _, _ - _ \vee E$
G	$\sim B$			$11 \ \& E$
G	$\sim (A \vee B)$			$12- _ \sim I$
G	$\sim (A \vee B) \equiv (\sim A \ \& \ \sim B)$			$1-10, 11- _ \equiv I$

p. 211

(i) In the derivation at the top of the page, read

$1, 3 \equiv E$

instead of

$1, 2 \equiv E$

on line 4 of the derivation, and

$1, 8 \equiv E$

instead of

$1, 7 \equiv E$

on line 9 of the derivation.

(ii) On line 5 of the lower block of text, read

We will take 'B' as our new goal.

instead of

We will take 'B' as our new goal 'B'.

p. 219

In the second derivation on this page, read

$A / \sim E$

instead of

$A / \sim I$

on line 4 of the derivation.

p. 220

In the first derivation on this page, read

$A / \sim E$

instead of

$A / \sim I$

on line 4 of the derivation, and

4-8 $\sim E$

instead of

4-8 $\sim I$

on line 9 of the derivation.

p. 223

(i) Exercise 5.3E1(m) should read

$\{(A \vee B) \supset C, (D \vee E) \supset [(F \vee G) \supset A]\} \vdash D \supset (F \supset C)$

instead of

$\{A \vee B \supset C, (D \vee E) \supset [(F \vee G) \supset A]\} \vdash D \supset (F \supset C).$

(ii) Exercise 5.3E1(p) should read

$$\{(A \& B) \equiv (A \vee B), C \& (C \equiv \sim\sim A)\} \vdash B$$

instead of

$$\{(A \& B \equiv (A \vee B), C \& (C \equiv \sim\sim A)\} \vdash B.$$

p. 225

(i) Exercise 5.3E6(c) should read

$$\{A \equiv (\sim B \vee C), B \supset C\} \vdash A$$

instead of

$$\{A \equiv \sim(B \vee C), B \supset C\} \vdash A.$$

(ii) Exercise 5.3E6(g) should read

$$\{A \supset (D \& B), (\sim D \equiv B) \& (C \supset A)\} \vdash (A \supset B) \supset \sim C$$

instead of

$$\{(A \supset (D \& B), (\sim D \equiv B) \& (C \supset A)\} \vdash (A \supset B) \supset \sim C.$$

(iii) The first line of the argument in exercise 5.3E7(*d) should read:

$$\sim(F \vee G) \equiv \sim(H \vee I)$$

instead of

$$\sim(F \vee G) \equiv (\sim(H \vee I)).$$

p. 226

In exercise 5.3E7(*j), the conclusion of the argument should be

$$\sim(A \vee \sim B)$$

instead of

$$\sim(A \vee B).$$

Page 180:

4 lines from bottom:

delete the two occurrences of '2' in the right column

2 lines from bottom:

replace 'Q' with 'P' in the right column

Last line:

replace 'P' with 'Q' in the right column

That is, the incorrect rule

Conditional Elimination 2

```
| P  $\supset$  Q
| Q
|
|
| P
```

should be replaced with the correct rule

Conditional Elimination

```
| P  $\supset$  Q
| P
|
| Q
```

Page 229:

10 lines from bottom:

replace ' \sim Q' with ' \sim P'

Page 362:

Lines 19-22:

delete these lines (which begin "A shorter version is")

Line 23:

delete "very same pear as either x or y."

Page 521:

Change:

1. A literal that is not an identity sentence

2. A compound sentence that is not a universally quantified sentence and is decomposed
3. A universally quantified sentence ($\forall x$) P such that $P(a/x)$ also occurs on that branch *for each constant* a occurring on the branch and $P(a/x)$ occurs on the branch for at least one constant a
4. A sentence of the form $a = t$, where a is an individual constant and t is a closed term such that the branch also contains, for every literal P on the branch containing t , every sentence $P(a//t)$ that can be obtained from P by Identity Decomposition.

to:

1. A literal that is not an identity sentence of the form $\mathbf{a} = \mathbf{t}$, where \mathbf{a} is an individual constant and \mathbf{t} is a closed term
2. A sentence of the form $\mathbf{a} = \mathbf{t}$, where \mathbf{a} is an individual constant and \mathbf{t} is a closed term such that the branch also contains, for every literal \mathbf{P} on the branch containing \mathbf{t} , every sentence $\mathbf{P}(\mathbf{a}//\mathbf{t})$ that can be obtained from \mathbf{P} by Identity Decomposition
3. A compound sentence that is not a universally quantified sentence and is decomposed
4. A universally quantified sentence ($\forall \mathbf{x}$) \mathbf{P} such that $\mathbf{P}(\mathbf{a}/\mathbf{x})$ also occurs on that branch *for each constant* \mathbf{a} occurring on the branch and $\mathbf{P}(\mathbf{a}/\mathbf{x})$ occurs on the branch for at least one constant \mathbf{a} .

That is, amend clause 1 as shown, move clause 4 so that it is now clause 2, and renumber clauses 2-3 so that they are now clauses 3-4.

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