Introduction to Mathematical Logic

(Extended Edition)

errata

1. **p.91.** Exercise 2.10, in the second line, "... implies $f(X) \subseteq F(Y)$." should be: "... implies $f(X) \subseteq f(Y)$."

2. **p.111.** Several occurrences of "may not" should be changed to "does not", namely, at lines::

10-11: "... on x but may not halt..." should be "... on x but does not halt..."

-13: "...YES, but may not halt..." should be "...YES, but does not halt..."

-9: "...NO, but may not halt..." should be "...NO, but does not halt..."

3. **p.180.** Exercise 6.4, the boolean table for $\underline{\uparrow}$. The **1** and **0** along the diagonal should be swapped, i.e., the table should be:

$x \underline{\uparrow} y$		**1**	**0**	$: y$
$x :$	**1**	**0**	**1**	
	0	**1**	**1**	

4. **p.211.** In Definition 8.22, conclusion of the rule MP has missing Γ on the left of $\vdash_{\mathcal{N}}$. The conclusion of the rule should be: $\Gamma \vdash_{\mathcal{N}} B$.

5. **p.237.** The proof of Lemma 10.2 is by induction on the complexity of the context $F[\_]$, not of $F[A]$. The first special case is $F[\_] = [\_]$, atomic case of $F[\_]$ gives special case or no substitution, and the inductive cases should all have $[A]$ replaced by $[\_]$ on the left of ::.

6. **p.273.** The example rules i) and ii) should have added Γ to the left of $\vdash_{\mathcal{N}}$ ... They illustrate general situation, and not only when the example formulae are provable without any Γ.