

# Errata For 1st Edition

## Chapter 1

- p. 17, second paragraph from the bottom: “As explained in Sect. 1.10” should be “As explained in **Definition 1.10**”.

## Chapter 2

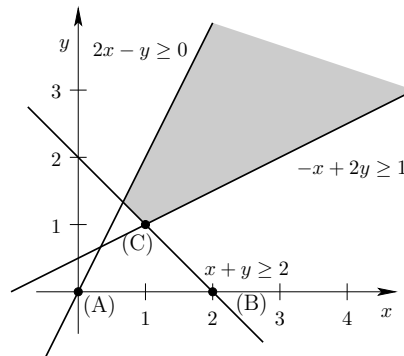
- Sect. 2.3.2: After running Apply one needs to run reduce, i.e., apply the three reduction rules. This was not made clear in the writing of this section.
- p. 50, problem 2.3. With Berkmin it is impossible to reach a conflict with the given set of clauses, so solve this question with the VSIDS strategy. When we say ‘... make a decision that leads to a conflict’ we mean to make decisions that eventually lead to a conflict (i.e., it is possible that a conflict can be reached only after several decisions).
- p. 51, problem 2.6. The task here is of course to formulate the described problem in propositional logic.

## Chapter 4

- p. 82, Example 4.1: “because  $x_1$  and  $x_2$  are in the same class” should be “because  $x_1$  and  $x_3$  are in the same class”.

## Chapter 5

- p. 115, Fig. 5.1: The constraint in the picture ( $-x + 2y \geq 0$ ) does not match the constraint in the example ( $-x + 2y \geq 1$ ). The correct plot is as follows:



- p. 125, Eq. (5.32) last line should be  $K^-$ , not  $J^-$ .

## Chapter 6

- p. 159, Eq. (6.46) should be:

$$\langle a \rangle_S < \langle b \rangle_S \iff (a_{l-1} \iff b_{l-1}) \oplus \text{add}(a, \sim b, 1).cout .$$

- p. 159, Eq. (6.49) should read:

$$ls(a_{[l]}, b_{[n]U}, s) \doteq \lambda i \in \{0, \dots, l-1\} . \begin{cases} (ls(a, b, s-1))_{i-2^s} & : i \geq 2^s \wedge b_s \\ (ls(a, b, s-1))_i & : \cancel{i \geq 2^s} \wedge \neg b_s \\ 0 & : \text{otherwise} . \end{cases}$$

- p. 163, Def. 6.9, second line: “that uses only constants on the right-hand side of binary bitwise **operators**, ...”
- p. 163, Eq. 6.57 (and the sentence before): replace “ $-\llbracket b \rrbracket + 1$ ” by “ $-\llbracket b \rrbracket - 1$ ”
- p. 167, Problem 6.1: replace “ $\oplus$ ” by “/”.

## Chapter 7

- p. 175, Example 7.6: “two arrays  $a_1$ ” should say “two arrays  $a_1$  and  $a_2$ ”
- p. 177 – 178, redundant closing parentheses in Eq. (7.19) – (7.22).

## Chapter 8

- p. 187, Definition 8.6:  $L_D$  should be  $\mathcal{L}_D$ .

## Chapter 11

- Fig. 11.2 on page 248: the labeling  $dl < 0$  and  $dl \geq 0$  coming out of ANALYZE-CONFLICT stands for ‘decision level’. On the other hand in Alg. 11.2.2 in the previous page we used ‘backtrack-level’, so the labels should have been  $bl < 0$  and  $bl \geq 0$ .
- Problem 11.2: When we say that the formula is in NNF we mean that negations are pushed all the way into the atoms, e.g.,  $\neg(x = y)$  should be  $(x \neq y)$  and hence the literal is  $e(x \neq y)$ .

## References

- p. 293: ref 130 is missing the publisher (Springer)