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Addenda & Errata

(additions in blue; corrections in red; notes in green)

p. 24, **Example 2.1.4.** For $m, n \in \mathbb{Z}^{+}$, the relation "divides," ...

p. 43, **Exercise 2.2.13.1.** Figure 1.5.2.1.

p. 50, l. 12: Computation is carried out with and on...

p. 62, **Exercise 3.1.5.** There are two consecutive Exercises numbered 3.1.5. Consider them as a single Exercise with 7 items.

p. 109, **Exercise 3.3.6.2.** $P = \{S \rightarrow SS \mid a \mid b\}$.

p. 114, **Example 3.4.2.** Let there be given the UG $G = (\{S, A, B\}, \{a, b\}, S, P)$...

p. 124, footnote 5: Def. 3.1.11.3 ...

p. 125, **Example 4.1.2.**

	$\delta(q, 0)$	$\delta(q, 1)$
$\rightarrow *q_0$	q_0	q_1

p. 135ff, **Example 4.1.8.** With respect to each of these two sets, we determine the transitions from each symbol of the alphabet, which gives us:

$$E_0, 0 = \begin{cases} \delta(q_2, 0) = q_4 \in E_0 \\ \delta(q_3, 0) = q_4 \in E_0 \\ \delta(q_4, 0) = q_4 \in E_0 \end{cases}$$

$$E_0, 1 = \begin{cases} \delta(q_2, 1) = q_5 \in E_1 \\ \delta(q_3, 1) = q_5 \in E_1 \\ \delta(q_4, 1) = q_5 \in E_1 \end{cases}$$

We verify that all the transition functions of $(E_0, 0)$ result in states $q_i \in E_0$ and all the transition functions of $(E_0, 1)$ give us states $q_i \in E_1$, and we leave E_0 as is. We now turn to E_1 and apply the same procedure:

$$E_1, 0 = \begin{cases} \delta(q_0, 0) = q_1 \in E_1 \\ \delta(q_1, 0) = q_0 \in E_1 \\ \delta(q_5, 0) = q_5 \in E_1 \end{cases}$$

$$E_1, 1 = \begin{cases} \delta\left(q_0, 1\right) = q_2 \in E_0 \\ \delta\left(q_1, 1\right) = q_3 \in E_0 \\ \delta\left(q_5, 1\right) = q_5 \in E_1 \end{cases}$$

With respect to $(E_1, 1)$, we verify that $\delta\left(q_0, 1\right), \delta\left(q_1, 1\right) \in E_0$ but $\delta\left(q_5, 1\right) \in E_1$; ...

p. 145, **transition table for** δ, l. row 5: $\{q_0, q_1\} \mid \{q_0, q_1, q_2\} \quad \{q_0, q_3 \cancel{, q_4}\}$

Last updated: April 2019