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Page 30. Last line. The item is h), not e).

Page 33. Problem 43. The function f is $f : \mathbf{N} \times \mathbf{N} \to \mathbf{N}$.

Page 49. Line 1. Replace "integer" with "natural number".

Page 54. The relation $<$ defined on $\mathbf{Z}[x]$ in Example 2.34 is not a linear order. Indeed, two polynomials $f = x + 1$ and $g = x + 2$ are distinct, $f \neq g$, but incomparable, that is, $f \not< g$ and $g \not< f$. Therefore, $<$ does not satisfy the Trichotomy Law (cf. page 132). The correct order should be defined as follows. First, we say that a polynomial $f = a_n x^n + a_{n-1} x^{n-1} + \cdots + a_0$ is positive, $f > 0$, and negative, $f < 0$, if the "leading" coefficient a_n is positive or, respectively, negative. Now we set $f < g$ if $g - f > 0$.

Page 60. Theorem 3.2. (Symmetry.) Should be "If $ad = cb$, then $cb = ad$."

Page 61. Definition 3.5. Replace $[b, c]$ with $[c, d]$.

Page 62. Theorem 3.8. First line should be:
If $(a, b) \sim (a', b')$ and $(c, d) \sim (c', d')$, then ...

Page 65. Lines 2 and 3. Replace (a, b) and (c, d) with (m, n) and (p, q), respectively. Also change x and y to a and b, respectively.

In the proof of Theorem 3.14, references must be to Exercise 10 f).

Page 68. Cases **R1** and **R2** in the proof of Theorem 3.19 refer to Exercise 2, not to Exercise 3.

Page 70. The right hand side of the equality in Theorem 3.25 i) must be $\dfrac{a \cdot d}{b \cdot c}$.

Page 75. Second line in the proof of Theorem 3.38 must be

$$|a_m - a_n| < 1, \qquad \text{for all } m, n > N - 1.$$

Page 79. "Exercise 10 c)" must be "Exercise 11 c)".

Page 80. Line 5. Change "concepts" to "concept".

Page 82. Exercise 23 refers to Exercise 12 in Chapter 2.

Page 94. Line 11. Change $[(a_m))]$ to $[(a_m)]$.

Page 118. Change the definition of the signum function into

$$\operatorname{sgn} x = \begin{cases} 1, & \text{if } x \geq 0, \\ -1, & \text{if } x < 0. \end{cases}$$

Page 119, Line 8. Change "Exercise 8" to Exercise 9.

Page 124. Exercise 8. The first inequality must be $|u + v| \geq |v|$.

Page 125. Exercise 21 is the same as Exercise 12.