

Additions to Second Edition Errata and Comments

November 14, 2002

We thank Harry Hirsch and Luis Serra for pointing out these errors.

Page 111 The subheading at the top of the page should be “The existence of a *convergent* subsequence in a compact set”, not “the existence of a *convergence* subsequence ...”.

Page 305 Line 5 should read: “... good picture of a parametrized curve or surface” not “... good picture of parametrized the curve or surface.”

Pages 348–349 In several places – Equations 3.5.23, 3.5.25, and 3.5.28, and in the sentence before Equation 3.5.25 – we write things of the form $\alpha_1(\mathbf{x})^2$ which would be better written with an additional set of parentheses: $(\alpha_1(\mathbf{x}))^2$.

Page 402 Six lines from the bottom, in the statement labeled (2): exists, not exits.

Page 421 Equation 4.2.15: this sums to 2, not 4/3! So in the next sentence, it should be “any sum smaller than 2 ...”

We get the result 2 as follows:

For $|x| < 1$, we have

$$\sum_{n=1}^{\infty} x^n = \frac{1}{1-x}, \quad \text{so} \quad \sum_{n=1}^{\infty} nx^{n-1} = \frac{1}{(1-x)^2},$$

which gives

$$\sum_{n=1}^{\infty} nx^n = \frac{x}{(1-x)^2},$$

which gives

$$\sum_{n=1}^{\infty} n \cdot \frac{1}{2^n} = \frac{1/2}{(1/2)^2} = 2.$$