ERRATA FOR THE BOOK
"THE HOW AND WHY OF ONE VARIABLE CALCULUS",
BY AMOL SASANE,
WILEY, 2015

Page ix, line 2:
Replace
"Who is this book is for?"
by
"Who is this book for?" .

Page 115, line 3 in Example 3.18:
Replace
"We claim that $\lim_{x\to 0} f(x) = 2$"
by
"We claim that $\lim_{x\to 1} f(x) = 2$" .

Page 117, first line in the proof of Theorem 3.15:
Replace
"As an example, let us prove (2)"
by
"As an example, let us prove (1)" .

Page 123, line 6 in Exercise 3.51:
Replace
"$\dfrac{A}{(s-\alpha)^k}$:"
by
"$\dfrac{A}{(x-\alpha)^k}$:" .

Page 147, Definition 4.3, line 3 in item (2):
Replace
"$\lim_{x\nearrow b} \dfrac{f(x)-f(a)}{x-a} = f'_-(a)$"
by
"$\lim_{x\nearrow b} \dfrac{f(x)-f(b)}{x-b} = f'_-(b)$" .

Page 168, line 6:
Replace

"$p(x) := f(a) + \dfrac{f'(a)}{1!}(x-1) + \cdots + \dfrac{f^{(d)}(a)}{d!}(x-a)^d, \quad x \in \mathbb{R}$"

by

"$p(x) := f(a) + \dfrac{f'(a)}{1!}(x-a) + \cdots + \dfrac{f^{(d)}(a)}{d!}(x-a)^d, \quad x \in \mathbb{R}$" .

Page 180, last line in Theorem 4.16:
Replace

"***then*** $\lim\limits_{x\to\infty} \dfrac{f(x)}{g(x)} = \ell$"

by

"***then*** $\lim\limits_{x\to a} \dfrac{f(x)}{g(x)} = \ell$" .

Page 181, last line in the proof of Theorem 4.16:
Replace

"Hence $\lim\limits_{x\to\infty} \dfrac{f(x)}{g(x)} = \ell$"

by

"Hence $\lim\limits_{x\to a} \dfrac{f(x)}{g(x)} = \ell$" .

Page 191, line 2:
Replace

"$m_k := \sup\limits_{x\in[\frac{k}{n},\frac{k+1}{n}]} f(x) = \dfrac{k^2}{n^2}$"

by

"$m_k := \inf\limits_{x\in[\frac{k}{n},\frac{k+1}{n}]} f(x) = \dfrac{k^2}{n^2}$" .

Page 203, line 5 (i.e., the line just after the word "Thus"):
Replace

"$\epsilon > \overline{S}(f, P_\epsilon) - \underline{S}(P, \epsilon)$"

by

"$\epsilon > \overline{S}(f, P_\epsilon) - \underline{S}(f, P_\epsilon)$" .

Page 213, line 13:
Replace

"$\leq \overline{S}(|f(\cdot) - f(c)|, \{c, x\})$"

by

"$\leq \dfrac{1}{|x-c|} \cdot \overline{S}(|f(\cdot) - f(c)|, \{c, x\})$" .

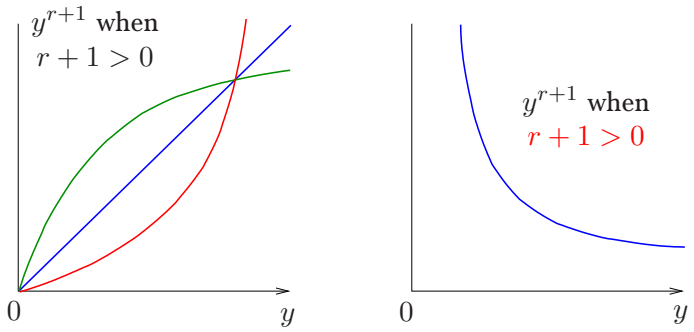
Page 235, line 2:
Replace

"$\lim_{y\to\infty} \int_0^{\infty} \frac{1}{1+x^2}\, dx$"

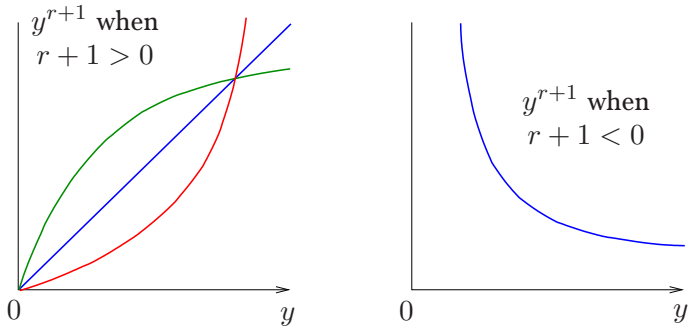
by

"$\lim_{y\to\infty} \int_0^{y} \frac{1}{1+x^2}\, dx$" .

Page 238, labeling in the rightmost figure at the bottom of the page:
Replace



by



Page 325, item (l) in the middle of the page:
Replace

"(l) if $L>0$, then $\sum_{n=0}^{\infty} c_n x^n$ is absolutely convergent for all $x \in (-L, L)$, and"

by

"(l) if $L>0$, then $\sum_{n=0}^{\infty} c_n x^n$ is absolutely convergent for all $x \in (-\frac{1}{L}, \frac{1}{L})$, and" .

Page 419, Solution to Exercise 4.70, line 2 in item (4):
Replace
"(Or because f'' is strictly increasing in a neighbourhood of 0 ..."
by
"(Or because f'' is strictly decreasing in a neighbourhood of 0 ..." .

Page 425, line 4:
Replace
"Let $P := P_{[a,c-\delta]} \bigcup \{c-\delta, c+\delta\} \bigcup P_{[a,c-\delta]}$"
by
"Let $P := P_{[a,c-\delta]} \bigcup \{c-\delta, c+\delta\} \bigcup P_{[c+\delta,b]}$" .

Page 452, caption for Figure 7:
Replace
"**Figure 7**. Graphs of $e^x, -e^{-x}$ on the left, and the graph of cosh on the right"
by
"**Figure 7**. Graphs of $e^x, -e^{-x}$ on the left, and the graph of $\sinh$ on the right".

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