

**BASIC REAL ANALYSIS.      ERRATA**

	<b>IS NOW</b>	<b>SHOULD BE</b>
p. 3, 7 ↑	$n$	$n + 1$
p. 11,5 ↑	sup	inf
p. 16,.4↑	Integers	integers
p. 17,7	$x^2 < 0$	$x^2 < 2$
p.17, 10	$x^2 \geq 0$	$x^2 \geq 2$
p. 23,7↑	$>$	$\geq$
p. 24,15	$>$	$\geq$
p. 24,16	$< \frac{1}{N}$	$\leq \frac{1}{N}$
p. 24,1↑	$<$	$\leq$
p. 25,5↑	get	get for $n \geq N$
p. 28,12↑	$s_n$	$a_n$ (twice)
p. 29,1	Rational	rational
p. 29,2	Number	number
p. 30,3	$n > N$	$n \geq N$
p. 30,4	$n^2 >$	$n^2 > N^2 >$
p. 35, 6	$\frac{n^n}{2}$	$\frac{n}{2^n}$
p. 36,11↑	$k > K$	$k \geq K$
p. 36,11↑	$n > N$	$n \geq N$
p. 36,12↑	$n_k > n_K$	$n_k \geq n_K$
p. 44,6↑	$N$	$n$
p. 44,4↑	<b>OMIT:</b> for $n > N$	
p. 45,4↑	$n > N$	$n \geq N$
p.57, 1↑	$= N$	$= M$
p.59,.1↑	$f(x+)$	$f(a+)$
p.61, 6↑	$A$	$a$
p.63, 16	$f(b_n)$	$f(a_n)$
p.64, 13	$f(c) = g(b)$	$f(c) = g(c)$
p.68, 14	) Prove that $c = b$ .	Prove that $c = b$ .)

p. 70, 14	$(0 + h)^2$	$(0 + h)^{2/3}$
p. 70, 14	$1/h^{2/3}$	$1/h^{1/3}$
p. 74,8	$\epsilon_2$	$\epsilon_2$
p. 78,5↑	Hence	Hence, since $y - x > 0$
p. 81, 3↑	$f(0)$	$f(0+)$
p. 81, 3↑	$g(0)$	$g(0+)$
p. 82,3↑	$0 < x < a$	$0 < x < b$
p. 83,5	$x > a > b$	$0 < x < a < b$
p. 83,5↑	$\lim_{x \rightarrow 0}$	$\lim_{x \rightarrow 0+}$ (twice)}
p. 83,3↑	$\lim_{x \rightarrow 0}$	$\lim_{x \rightarrow 0+}$ (3 times)
p.85, 2	$f^{(k)}(x)$	$f^{(n)}(x)$
p. 93,2↑	If	Then
p. 93,1↑	<b>DELETE THIS LINE</b>	
p. 94, 5↑	,necessary,	necessary
p. 95,10	$\vee$	$\cup$
p. 95,4↑	$-\max$	$\max$
p. 97, 4	$\Delta x$	$\Delta x_i$
p. 99,7↑	$\leq 2\delta <$	$< 2\delta =$
p. 103,4	Integrals	integrals
p. 103,5↑	$ f(x)  \leq M$	$ f(x)  \leq M/2$
p. 105,.2	$R(\pi_n, \xi)$	$R(\xi, \pi_n)$
p. 105, 4	$R(\pi_n, \xi)$	$R(\xi, \pi_n)$
p. 106, 5	$R(\pi, \xi)$	$R(f, \xi, \pi)$
p. 106,1↑	$\leq$	$<$
p.107, 3↑	$f'(c)$	$f'(c)(x_i - x_{i-1})$
p.109, 8↑	$x(t) = \cos t$	$x(t) = \sin t$
p. 113,9	$f(x)$	$ f(x) $
p. 113,11	$f(x)$	$ f(x) $
p.114, 8↑	$\left[\frac{\cos x}{x^2}\right]$	$\left[\frac{\cos x}{x}\right]$
p.115, 1	congruent	convergent
p. 117, 8	$a_n$	, $a_n$

	<b>OMIT FIRST = SIGN</b>	
p. 118, 9		
p. 120, 10↑	test	Test
p.125,11	$\sum_{k=1}^{\infty}$	$\sum_{k=0}^{\infty}$
p.125,13	$\sum_{k=1}^{\infty}$	$\sum_{k=0}^{\infty}$
p.126,2	$\sum_{k=1}^{\infty}$	$\sum_{k=0}^{\infty}$
p.126, 7	$\sum_{k=1}^{n-1}$	$\sum_{k=1}^n$
p.126, 8	$(a_n - a_{n-1})$	$(a_{n+1} - a_n)$
p.126, 9	$(a_n - a_1)$	$(a_{n+1} - a_1)$
p. 128, 10	Test, as in	Test in
p.130, 1	$f(n+1) \geq a_{n+1}$	$f(n+1) = a_{n+1}$
p.130, 11	$s_n$	$s_m$
p.130, 1↑	$\int_1^b$	$\int_1^{\infty}$ (first time only)
p.131, 3	$\int_1^b$	$\int_1^{\infty}$
p.134, 5	$\sum_{k=1}^{\infty}$	$\sum_{k=2}^{\infty}$
p.134, 8	$\sum_{k=1}^{\infty}$	$\sum_{k=2}^{\infty}$
p.137, 10	$\sum_{k=0}^{\infty}$	$\sum_{k=1}^{\infty}$
p.141, 1↑	$\sum_{k=0}^{\infty}$	$\sum_{k=2}^{\infty}$
p.148, 4↑	$nx e^{-nx}$	$n^2 x e^{-nx}$
p.148, 13	1 otherwise	0 otherwise
p.151, 3↑	$f_n(c)$	$f_N(c)$
p.153, 1↑	$s_n(x) - f(x)$	$f(x) - s_n(x)$
p.154, 9	$\sum_{k=0}^{\infty}$	$\sum_{k=1}^{\infty}$
p.154, 11	$\sum_{k=0}^{\infty}$	$\sum_{k=1}^{\infty}$ (twice)
p.155, 7	then	then for $n \geq N$
p.155, 9↑	such that	such that for $n \geq N$
p.156, 7	so that	in $[x_i, x_{i-1}]$ , so that
p. 156, 9	and by symmetry	By symmetry
p.157, 7↑	converge	converge uniformly
p. 157, 7↑	then the	then their
p.158, 11	$\sum_{k=0}^{\infty}$	$\sum_{k=1}^{\infty}$
p.160, 4↑	$f(x)$	$\lim f_n(x)$

p.164, 10	$ x $	$ x - a $
p.166, 9	$1/n$	$1/n_k$
p.167, 8	$\sum_{k=0}^{\infty}$	$\sum_{k=1}^{\infty}$
p.167, 5↑	$\sum_{k=1}^{\infty} \frac{1}{n} x^n$	$\sum_{k=1}^{\infty} x^n$
p.169, 2	$x^n$	$x^{n-1}$
p.169, 6	$\sum_{k=1}^{\infty}$	$\sum_{k=0}^{\infty}$
p.169, 9	$x^n$	$x^{n-1}$
p.169, 12	$x^n$	$x^{n-1}$
p.169, 12	$r^n$	$r^{n-1}$
p.169, 12	$n \left(\frac{r}{\rho}\right)^n$	$\left(\frac{M}{r}\right) n \left(\frac{r}{\rho}\right)^n$
p.170, 3	$x^k$	$x^{k-1}$
p.173, 7	$\sum_{k=1}^n$	$\sum_{k=0}^n$
p.173, 18	$\sum_{k=1}^n$	$\sum_{k=0}^n$
p.175, 6	$x^n$	$x^{n+1}$
p.175, 6	<b>OMIT</b> the repeated term.	

The line should read  $0 < R_n < e^x \frac{x^{n+1}}{(n+1)!} \rightarrow 0$ .

p. 180, 5	$s_n$	$s_n$ of $\sum_{n=0}^{\infty} a_n$
p.181, 5	$\frac{1}{n+1}$	$\frac{(-1)^n}{n+1}$
p.183, 8	and,	and
p.183, 10	<b>OMIT</b> , for $0 \leq x \leq 1$ , we have	
p.183, 12	We then	we
p.184, 5↑	$\sum_{k=1}^{\infty}$	$\sum_{k=0}^{\infty}$
p.185, 8↑	$\sum_{k=1}^{\infty}$	$\sum_{k=0}^{\infty}$
p.185, 11↑	$f^{(n)}(x) \geq 0$	for all $n$ , $f^{(n)}(x) \geq 0$
p.196, 18↑	numbers on	numbers in
p. 207, 10	$S$	$K$
p. 208, 4	subset of	subset $K$ of