

MRA Volume I: Changes for Reprinting September 2008

When counting lines matrices and formulae count as one line and spare lines and footnotes do not count.

‘Line $-n$ ’ means n lines up from the bottom, so ‘Line -1 ’ means the last line.

Page	Location	Comment
12	EX I.1.2(b)	Second + should be $-$. Then in the last two formulae of the solution, the derivative of the last term is the derivative of -1 times $4 \ln(x)/\exp(x)$ on the left hand side. The solution is correct.
29	Line 5	Switch +2 and -2 .
33	Line 20	Factor should be plural, i.e. ...holding all other risk factors constant.
47	Last bullet 2 nd set	Insert semi- before definite.
56	Line -3	w should have first element w_1 not w_t
58	Line 12	Odd font for P&L
60	Last line	Replace 0.850 by 0.840.
63	Line 8	Insert ‘or -1 ’ after $f = 1$ and say ‘...a Cholesky matrix rather than ‘the’ Cholesky matrix, as they are not unique as mentioned in following line.
64	Line 13	Add footnote after ‘...the relationship (I.2.33)’ as follows: ‘It is not always the case that $\mathbf{A} = \mathbf{LU}$, but it is always true that $\mathbf{PA} = \mathbf{LU}$ for some permutation matrix \mathbf{P} .’
66	Lines 5 and 6	Change k to n .
67	Line 4	Replace $k \times n$ by $n \times k$.
85	Line 4	Switch $>$ to $<$ and by way of explanation add a footnote at end of this sentence as follows: ‘If g is monotonic decreasing then $x < y \Leftrightarrow g(x) > g(y)$.’
91	2 nd and 3 rd bullet	Replace NORMSDIST by NORMDIST
92	Line -6	First $-$ should be $+$
93	Lines 3 and 7	Close up \ln and Y
94	Line 22	‘of the component density functions’...i.e. function should be plural
96	EX I.3.9, line 3	Second standard deviation is 5 not 3.
98	Line 2	Insert spacing between words of Student t distribution
100	Line -8	Delete (0,1) after t_v
108	(I.3.76)	In right hand side, change x and y to u and v .
108	(I.3.79)	In right hand side, dy to dx .
109	(I.3.81)	Should read $F(x y) = \frac{F(x,y)}{H(x)}$ and $F(y x) = \frac{F(x,y)}{G(x)}$
114	Lines 9 and 11	Delete ‘bivariate normal’
114	(I.3.95)	Insert suffixes on f 's in right hand side, so it reads $f(x_1, \dots, x_n) = f_1(x_1) \dots f_n(x_n)$
116	Line 3	Change strange font for Y
116	(I.3.100)	Change x to X
119	Line 6	Insert ‘inverse’ before value
122	Line -9	Change strange font for v , at present it looks like V .
122	Footnote 42	Replace second sentence with ‘Note that (I.3.114) follows from the relationships between sampling distributions stated in Section I.3.3.8’
123	Line -4	Should read $P\left(X < (\chi_v^2)^{-1}(u)\right) = u$
123	Line -1	Replace 0.05 by v twice.
124	Point 3.	Insert α after ‘significance level’.
126	(I.3.123)	Should read $t = \frac{\bar{X}_n - \mu}{s/\sqrt{n}} \sim t_{n-1}$
126	Line 5	Replace 0.25 by 2.5.
126	Line -4	Delete upper
126	Footnote 3	Change CHIDIST to CHIINV twice.
133	Line -1	Replace $\sigma^2/\sqrt{2n}$ by $\sigma^2\sqrt{2/n}$
134	(I.3.136)	Replace $\hat{\sigma}^2/\sqrt{2n}$ by $\hat{\sigma}^2\sqrt{2/n}$
134	Line 8	Delete ‘identically distributed’ and replace description with the following more precise one: ‘A stochastic process is a sequence of random variables drawn from the same

		family of distributions.’
136	First bullet	OLS acronym not defined until Section I.4.2.2, so insert footnote after OLS as follows: ‘OLS, or ordinary least squares, is introduced in Section I.4.2.2.’
141	Line –10	Replace ‘stationarity’ by ‘stationary’
144	Line 16	Insert ‘in’ before ‘further’
145	Figure I.4.1	Vertical axis label should be Amex Log Return
147	Footnote 6	Delete
147	Line above (I.4.8)	Switch variance and covariance.
148	(I.4.10)	Second μ_Y should read μ_X
148	(I.4.11)	Change + to – .
148	Line –8	Add footnote for further explanation as follows: ‘The reason we use $T - 2$ in the denominator here is clarified in the next subsection.’
150	(I.4.17)	Change <i>RSS</i> to <i>TSS</i>
150	Line –8	Replace 0.843 by 0.845
151	Line after (I.4.20)	Define α_0 and β_0 by inserting ‘ α_0 and β_0 are the values of α and β under the null hypothesis,’ after ‘where’. Then insert ‘and’ between the two formulae in (I.4.21)
151	Line –1	Change lower case <i>x</i> to upper case <i>X</i> twice.
152	Line 4	Change lower case <i>x</i> to upper case <i>X</i>
152	Table I.4.4	Interchange ‘One-sided’ and ‘Two-sided’ and replace last row of numbers by 1.638, 2.353, and 4.540.
153	Line 3	Replace ‘estimate’ by ‘estimated’
155	Line –8	Replace ‘distribution’ by ‘distributions’
161	Line above (I.4.35)	Insert subscript <i>t</i> on <i>Y</i>
162	Line 4	Insert ‘the’ before ‘regression’
163	(I.4.42)	Replace 5.7541 by 5.7542 (also when equation is repeated in solution to Ex I.4.10) and 0.2592 by 0.2594
163	(I.4.43) , (I.4.44)	Replace <i>k</i> by <i>k</i> - 1
164	Line 5 of solution	Replace 6.995 by 6.992
165	First matrix	Replace 8.82239 by 8.82388, also on p168 in matrix and under square root in line –6 and on p170 in matrix (twice).
173	(I.4.57)	Change 0.1223 to 0.1222 and in equation below change 0.0610 to 0.6102
177	Line 18	Change 2.287 to 2.265
178	Line –9	Change ‘errors process’ to ‘error process’
179	Line –6	Insert ‘a’ before ‘simple’
180	Line –23	Capitalize Stock Exchange
181	Line 8	Change ‘diversifiable’ to ‘undiversifiable.’ Then in Line 9 change ‘can’ to ‘cannot’ and in Line 10 change ‘What remains is’ to ‘It may also be called’.
188	Line –1	Delete ‘root’
191	Line –6	Replace 3.36% by 7.38%
193	(I.5.11)	Replace first x_1 in numerator by x .
194	Line -2	Replace 65 by 66. Also in Line –1 replace 65 by 64. Then in the solution $x_1 = 66, x_2 = 60, z_1 = 67, z_2 = 64$ and substituting in these values gives $y_1 = 66.6$ and $y_2 = 62.4$ and interpolated price on Tuesday is 65.2 .
195	Line –10	Change ‘10-delta’ to ‘75-delta’
196	Line –10	Change 19.5 to 0.195
196	Line –8	$a = 0.320$ (not -0.320)
197	Line – 1	Strictly speaking these intervals are half-open
198	(I.5.18) first eq.	On l.h.s. replace h_{i+1} by h_{i-1} and multiply rhs by 6.
202	(I.5.22)	Replace n by k and in next line insert ‘ k denotes the number of the iteration and’ between ‘where’ and ‘ J ’
204	Line 5	Replace £/\$ by \$/£. Also in title of Figure I.5.11 change ‘Sterling-US Dollar’ to ‘US Dollar-Sterling’
205	Line –3	Replace £/\$ by \$/£.
212	(I.5.35)	There are three ‘-’ signs here: change the second – to +
213	(I.5.37) - (I.5.38)	Change subscript ‘ $t + \Delta t$ ’ to subscript ‘ t ’ only for S (i.e. not on l.h.s.)
214	Line 2	Insert comma after u
214	Line 6	Change ‘four’ to ‘three’
214	(I.5.42)	Change $r - 1/2\sigma$ to $r - 1/2\sigma^2$

215	Line 20	Change ‘we obtain option price’ to ‘we obtain the option price’
215	Lines 25 and –8	Change 4% to 5%.
218	Footnote 31	Right bracket missing
219	Line 6	‘variance σ ’ should be ‘variance σ^2 ’.
227/228	Tables I.6.1 & 2	Change 0.005 in bottom right to 0.009
228	Lines 1 & 2	Change 27.75 to 27.51 and change 40.12 to 19.99
228	Up to Line –14	Interchange P and Q (.. prefers investment P to investment Q because P has higher expected utility – and similar change in the following)
229	Lines 1 & 2	Change \$5.27 to \$5.24 and \$6.33 to \$4.47 (also in following paragraph)
229	Lines 3 & 4	Change > to <, and change ‘..prefer Q to P’ to ‘..prefer P to Q’. Also at end of paragraph, should read ‘Since P has the higher...’
230	Line 13	Should read ‘and standard deviation of wealth under this distribution’
230	(I.6.5)	Change $E[U(P)]$ to $E[W]$ and $V[U(P)]$ to $V[W]$. Then in the next two lines change P to W (but not when subscript). Line 18 change U(P) to W, line 20 change P to W. In (I.6.6), change $E[U(P)]$ to $E[U(W)]$
230	(I.6.6)	Change first term on rhs from μ_P to $U(\mu_P)$. Also on rhs, two equations above.
230	Line 21	Insert ‘wealth resulting from’ before ‘investment’ and insert ‘P’ after investment and before ‘:’
231	Line 22	Change ‘very a’ to ‘a very’
232	Last sentence	Delete from ‘is the reciprocal ...’ onward. But keep footnote 8.
233	Line 17	Change ‘risk’ to ‘risky’. Also on 234 line –8.
233	Lines 18 and –2	Change ‘increase’ to ‘decrease’
236	Line 7	Change κ to κ .
238	Line 6	Insert ‘expected’ before ‘returns’
238	Line –7	Change ‘higher’ to ‘lower’.
240	Line -9	‘assets’ rather than ‘asset’s’
240	(I.6.28)	Change $\mathbf{1}'\mathbf{C}\mathbf{1}$ to $\mathbf{x}'\mathbf{1}_n \mathbf{x}$.
241	Line –12	Should read $10^{-2} \times (16w^2 - 21w + 9)$
242	Lines 7 and 8	σ_1/σ_2 should be σ_2/σ_1 and vice-versa
243	Line 4	Remove spare line and indent
244	(I.6.36)	Replace $\bar{\mathbf{R}}$ by \bar{R}
246	Line 2 of I.6.3.5	Delete ‘ $\mu =$ ’ from line 2 and insert it on line 3 after ‘expected portfolio return’; on line 5 interchange terms within curly brackets
249	Line –2	Change ‘arrest’ to ‘asset’
254	Line –7	Change (I.6.49) to (I.6.46)
262	Table I.6.7	Change –0.742 to –0.200; –0.573 to –0.176; 12.28% to 14.53% and 11.57% to 13.64%
262	Table I.6.8	Change 0.3984 to 0.3367; 0.3634 to 0.3083; 0.3884 to 0.3300 and 0.3561 to 0.3034.
263	(I.6.67)	The last term on the right hand side should be raised to the power 4 not 3.