

# Cambridge Senior Mathematics: Specialist Mathematics

## Units 3&4

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*Please note: all changes listed in this document have already been corrected in the online version of Specialist Mathematics Units 3&4. Changes are also taken into the print book whenever the book is reprinted.*

Page	Correction
88	In Exercise 2B, the final equation of the introductory information for question 21 now has a bold $c$ : $c = 4i + 5j$
180	In Example 18, the question has been corrected to read: Factorise: <b>a</b> $z^2 + 16$ <b>b</b> $2z^2 + 6$ Note: both parts no longer read = 0
229	In Exercise 6A, the expression for question 5j has been adjusted to: $\sec^2(5x^2)$
271	In Exercise 6G, question 17f has been deleted.
306	In Exercise 7D, the upper limit of the definite integral in question 1e has been corrected to: <b>1</b>
602	In Exercise 15B, the Example icon associated with question 1 has been corrected to: Example <b>7</b>
695	In Exercise 1B, the answers to question 4 parts a and b have been switched: - the answer to question 4a is: $100.95^\circ$ - the answer to question 4b is: $54.90^\circ$
696	In Exercise 1E, the answer to question 5c has been corrected to: $\{x : 1 \leq x \leq 2\}$
703	In the Chapter 1 review: Technology-free questions, the answer to question 28a has been corrected to: $\left(0, \frac{1}{10^4}\right)$
704	In Exercise 2B, the answer to question 3d part i has been corrected to: $-\frac{4}{3}j$
705	Three corrections have been made in Exercise 2B: - The answer to question 33a has been corrected to: $-100\sqrt{2}i + 100\sqrt{2}j$ - The answer to question 35 has been corrected to: $m = \frac{2n-9}{n+3}$ - The answer to question 36b has been corrected to: $\frac{3}{4}$
706	In Exercise 2E, the answer to question 1b has been corrected to: $\frac{2}{5}a + \frac{3}{5}b$
707	In the Chapter 2 review: Technology-free questions, the answer to question 19a part ii has been corrected to: $\frac{2}{3}a + \frac{1}{3}b$
715	Three corrections have been made to this page.  Firstly, two corrections have been made in Exercise 4A: - the answer to question 4d has been corrected to: $4 - 3i$ - the answer to question 7b has been corrected to: $-23 + 41i$

	<p>Secondly, in Exercise 4C, the answer to question 5f has been corrected to:</p> $4\text{cis}\left(\frac{5\pi}{6}\right)$
716	<p>In Exercise 4F, the answer to question 1d has been corrected to:</p> $2(z+3)\left(z-\frac{3}{4}+\frac{\sqrt{31}}{4}i\right)\left(z-\frac{3}{4}-\frac{\sqrt{31}}{4}i\right)$
720	<p>In the Chapter 4 review: Technology-free questions, the answer to question 4a has been corrected to:</p> $2\left(x+\frac{3}{4}+\frac{\sqrt{7}}{4}i\right)\left(x+\frac{3}{4}-\frac{\sqrt{7}}{4}i\right)$
722	<p>In the Chapter 4 review: Extended-response questions, the answer to question 14c has been corrected to:</p> $\left(x+\frac{\beta}{\alpha}\right)^2+y^2=\frac{\beta^2-\alpha\gamma}{\alpha^2}$
723	<p>Three corrections have been made in the Chapter 5 review: Technology-free questions:</p> <ul style="list-style-type: none"> <li>- the answer to question 9c has been corrected to: <math>\frac{\sqrt{5}}{2}</math></li> <li>- the answer to question 10 has had the final co-ordinate corrected to: <math>\left(\frac{21}{4}, 5\right)</math></li> <li>- the answer to question 14 has been the final solution to the equation portion of the answer corrected to: <b>8i</b></li> </ul>
724	<p>In the Chapter 5 review: Multiple-choice questions, the answer to question 8 has been corrected to: <b>E</b></p>
726	<p>Three corrections have been made to this page.</p> <p>Firstly, two corrections have been made in Exercise 6A:</p> <ul style="list-style-type: none"> <li>- the answer to question 8e has been corrected to</li> </ul> $\frac{\sin^2 x - \cos^3 x}{\sin x \cos x (\cos x + \sin^2 x)}$ <ul style="list-style-type: none"> <li>- the answer to question 10b has had the first equation corrected to:</li> </ul> $y = 4x - \frac{4\pi}{3} + \sqrt{3}$ <p>Secondly, in Exercise 6B, the answer to question 4d has been corrected to:</p> $\frac{1}{2}e^{-x+1}$
727	<p>In Exercise 6C, the answer to question 7 has had a label for part c added: the graph that is part of part b is the answer to part c.</p>
728	<p>Two corrections have been made to this page.</p> <p>Firstly, in Exercise 6D, the answer to question 3e has been corrected to:</p> $f''(x) = \frac{3x}{\sqrt{(16-x^2)^3}}$ <p>Secondly, in Exercise 6E, the answer to question 6b has had the value of the local max corrected to: <b>(-2, 4)</b></p>

732	In Exercise 6G, the answer to question 17f has been deleted. Note: question deleted from p.271
738	In Exercise 7F, the answer to question 7 has been corrected to: $\log_e \left  \frac{x}{(\sqrt[3]{x+1})^3} \right  + c$
744	In Exercise 8D, the answer to question 14b has been corrected to: $\pi \left( \frac{e^4}{2} - 4e^2 + \frac{23}{2} \right)$
746	In the Chapter 8 review: Extended-response questions, the answer to 3a part i has been corrected to: $\log_e x + 1$ ; $x \log_e x - x + c$
747	In the Chapter 8 review: Extended-response questions, the answer to question 15b has had the units corrected to: $\text{cm}^3$
749	In Exercise 9E, the answer to question 2c has been corrected so that the axes intercepts are marked with an open circle.
750	In Exercise 9H, the answer to question 3a has been corrected to: $\tan(1) + 2 \approx 3.5574$
751	In the Chapter 9 review: Technology-free questions, the answer to question 2a has been corrected to: $y = \frac{1}{2} \sin(2\pi x) - \frac{1}{2}$
754	In Exercise 10E, the answer to question 1 has had the units corrected to: $\text{m/s}^2$
756	In the Chapter 10 review: Extended-response questions, the answer to question 12b has been corrected to: $v = \begin{cases} 2t, & 0 \leq t \leq 3 \\ 6, & 3 \leq t \leq 13 \\ 8e^{13-t} - 2, & 13 < t \leq 13 + \log_e 4 \end{cases}$
764	In Exercise 12C, the answer to question 9c has been corrected to: $\dot{\mathbf{r}} = 2t\mathbf{j} + 6t\mathbf{k}$
765	In the Chapter 12 review: Technology-free questions, the answer to question 4b has been corrected to: $\frac{2}{\sqrt{7}}$
769	In the Chapter 13 review: Technology-free questions, the answer to question 23c has been corrected to: $\frac{5}{4} \text{ m}$
771	Several corrections have been made to this page.  Two corrections have been made in Exercise 15A: <ul style="list-style-type: none"> <li>- the answer to question 6c has been corrected to: <math>E(V) = -8.5</math>, <math>\text{Var}(V) = 2.25</math></li> <li>- the answer to question 15 has been corrected to: Mean 4250 g, sd <b>20.6155</b> g</li> </ul> Two correction have been made in Exercise 15D: <ul style="list-style-type: none"> <li>- the answer to question 1a has been corrected to: <b>0.0478</b></li> <li>- the answer to question 1b has been corrected to: <b>0.0092</b></li> </ul> In Exercise 15E, the answer to question 1b has been corrected to: <b>0.0288</b>
772	Three corrections have been made to the Chapter 15 review: Extended response questions: <ul style="list-style-type: none"> <li>- the answer to question 3a has been corrected to: <b>0.00621</b></li> <li>- the answer to question 3b has been corrected to: <b>0.000088</b></li> <li>- the answer to question 3c has been corrected to: <b>0.000032</b></li> </ul>
773	In Exercise 16C, the answer to question 4 has been corrected to: <b>0.02145</b>