

ERRATA FOR INITIAL PRINT RUN

QUESTIONS

pages 442, 451, 452, 453, 811

replace the word 'ogive' with 'cumulative frequency graph'

page 85 **Review set 3B**

- 3 b remove x at end of line:
 find y when $x = 0, \pm 1, \pm 2$

page 188 **Exercise 8L**

- 3 new question:
 The driver of a car travelling downhill on a road applied the brakes. The velocity, v , of the car in m/s, t seconds after the brakes were applied is given by $v(t) = -\frac{1}{2}t^2 + \frac{1}{2}t + 15$.
- unchanged from original
 - After how many seconds did the car reach its maximum velocity? Explain why this may have happened.
 - What was the maximum velocity reached?
 - How long does it take for the car to stop?

page 682 **Example 22**

Last three lines should read:
 $C(100) = 2.15(100) - 0.01(100)^2 + 0.00012(100)^3 + 185$
 $= 420$
 \therefore the total cost is \$420.

ANSWERS

page 747 **Exercise 2C**

- 1, 2, 3, 4, 8 replace a with u_1

page 747 **Exercise 2D**

- 2, 3, 4, 5 replace a with u_1

page 748 **Exercise 2E.2**

- 9 replace t_n with u_n

page 748 **Exercise 2D**

- 2, 3, 6 replace a with u_1

page 749 **Exercise 3G**

- 2 b solid graph label should be $y = 2^{-x}$
 4 a solid graph label should be $y = 3^{-x}$

page 749 **Exercise 3H**

- 1 c x -axis label should be t (hours)

page 750 **Exercise 3I**

- 1 b i 33.9°C
 c graph label should be $T_1 = 100 \times 2^{-0.02t}$

page 752 **Exercise 5A**

- 1 b x -axis label should be t
 y -axis label should be W

page 753 **Exercise 5E**

- 3 a, b, c replace y with yrs

page 763 **Exercise 8L**

- 3 new answers corresponding to new question:
 a 15 m/s
 b $\frac{1}{2}$ sec.; since the car was travelling downhill, it was accelerating. \therefore when the break was applied, the speed of the vehicle still increased for a short time.
 c $15\frac{1}{8}$ m/s
 d 6 seconds

ERRATA FOR FIRST REPRINT

ANSWERS

page 751 **Exercise 4B**

- 6 j answer should be 140

page 763 **Exercise 8H**

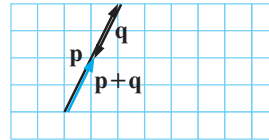
- 6 h iv x -intercepts of -4 and -2 should appear on the graph
 g iv x -intercepts of $4 \pm 2\sqrt{5}$ and a y -intercept of 1 should be added to the graph

page 763 **Exercise 8I**

- 3 answer should be: a, b, d, f

page 776 **Exercise 15B.1**

- 1 e answer should be:



page 788 **Review Set 19A**

- 8 replace \bar{W} with W'

page 788 **Review Set 19B**

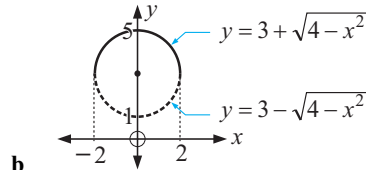
- 7 replace \bar{W} with W' and \bar{R} with R'
 10 b ii answer should be $\frac{328}{625}$

page 788 **Exercise 20A.2**

- 1 a answer should be 96.17

page 806 **Exercise 28B**

- 5 answer should be:



- b
 c $\doteq 237 \text{ units}^3$

page 806 **Exercise 29A**

- 2 a ii answer should be: $0 \leq x \leq 200 \text{ mm}$

page 806 **Exercise 29B**

- 4 a answer should be:

	6	(6, 1)	(6, 2)	(6, 3)	(6, 4)	(6, 5)	(6, 6)
	5	(5, 1)	(5, 2)	(5, 3)	(5, 4)	(5, 5)	(5, 6)
roll 1	4	(4, 1)	(4, 2)	(4, 3)	(4, 4)	(4, 5)	(4, 6)
	3	(3, 1)	(3, 2)	(3, 3)	(3, 4)	(3, 5)	(3, 6)
	2	(2, 1)	(2, 2)	(2, 3)	(2, 4)	(2, 5)	(2, 6)
	1	(1, 1)	(1, 2)	(1, 3)	(1, 4)	(1, 5)	(1, 6)
		1	2	3	4	5	6

roll 2

ERRATA FOR SECOND REPRINT

TEXT

page 40 **Opening Problem**

The opening paragraph should read:

"A circular stadium consists of sections as illustrated, with aisles in between. The diagram shows the tiers of concrete for the final section, **Section K**. Seats are to be placed along every concrete step, with each seat being 0.45 m wide. AB, the arc at the front of the first row is 14.4 m long, while CD, the arc at the back of the back row is 20.25 m long."

The angle 32° in the diagram should be removed.

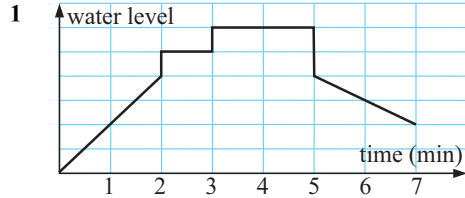
c answer should be:

	f	f^{-1}
domain	$x \in \mathbb{R}$	$x > 0$
range	$y > 0$	$y \in \mathbb{R}$

3 a question should be:

Find in terms of \mathbf{i} and \mathbf{j} and velocity vector of the liner.

ANSWERS



14 £53 519.29

9 $\pm \frac{1}{6} \times 2^{n-1}$

4 a 12 bears b 146 bears

9 a $5 \ln 2$ b $3 \ln 5$ c $6 \ln 3$

10 a $x \doteq 5.99$ b $x \doteq 0.669$ c $x \doteq 6.80$
d $x \doteq 1.10$ or 1.39

5 c ii 0.9

2 a $\vec{AB} = \begin{bmatrix} 4 \\ -1 \\ -3 \end{bmatrix}$, $\vec{BA} = \begin{bmatrix} -4 \\ 1 \\ 3 \end{bmatrix}$

7 b 36% c i 0.527 ii 0.030

1 a 1 m/s b 3 km/h c \$50/item d -5 bats/week

2 a 8200 L c 8200 L/hour

1 h $8x - 4$

4 c $2x - 10$

ERRATA FOR THIRD REPRINT

TEXT

c answer should be:

	f	f^{-1}
domain	$x \in \mathbb{R}$	$x > 0$
range	$y > 0$	$y \in \mathbb{R}$

2 b question should finish:
... velocity reaches (18, 21) in 10 seconds

4 d question should start:
If they start at 6:00 am, find the time...

3 a question should be:
Find in terms of \mathbf{i} and \mathbf{j} and velocity vector of the liner.

8 b If the birth rate is 6%, the maximum carrying capacity is 24 000 and 5% is harvested, find the stable population.

c If the harvest changes to 4%, what will the stable population increase to?

The definite integrals in the definitions should be:

$$\int_a^b f(x) dx$$

The definite integral in the top definition should be:

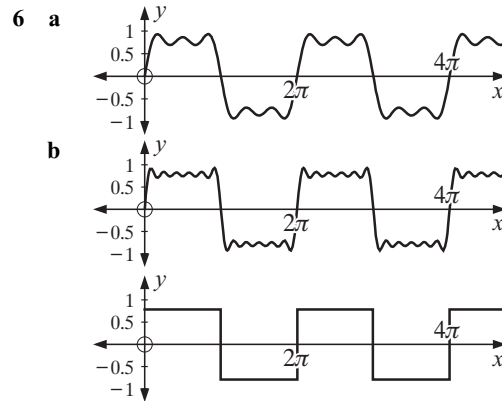
$$\int_a^b f(x) dx$$

ANSWERS

9 a $5 \ln 2$ b $3 \ln 5$ c $6 \ln 3$

10 a $x \doteq 5.99$ b $x \doteq 0.669$ c $x \doteq 6.80$
d $x \doteq 1.10$ or 1.39

5 c ii 0.9



4 b $\sin \beta = \frac{-\sqrt{21}}{5}$, $\sin 2\beta = \frac{-4\sqrt{21}}{25}$

6 b $\frac{1}{\sqrt{2}}(\mathbf{i} - \mathbf{j})$

6 b ii $\theta \doteq 114.8^\circ$

2 a $\vec{AB} = \begin{bmatrix} 4 \\ -1 \\ -3 \end{bmatrix}$, $\vec{BA} = \begin{bmatrix} -4 \\ 1 \\ 3 \end{bmatrix}$

3 b $k = -5$

2 b $\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -2 \\ 6 \end{bmatrix} + \frac{t}{2.5} \begin{bmatrix} 20 \\ 15 \end{bmatrix}$, $t \in \mathbb{R}$

4 d 10:12 am

1 h $8x - 4$

4 c $2x - 10$

The answers for questions 2 and 3 should be swapped.

ERRATA FOR FIFTH REPRINT

ANSWERS

page 769 **Exercise 13E**

1 a $T \doteq 6.5 \sin \frac{\pi}{6}(t - 4.5) + 20.5$

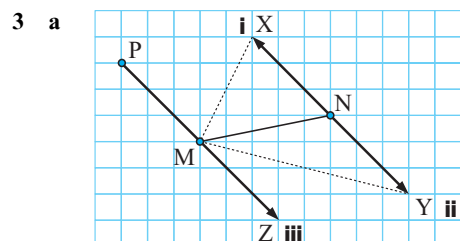
page 772 **Review set 13C**

1 a $T \doteq 7.05 \sin \frac{\pi}{6}(t - 10.5) + 24.75$

page 773 **Exercise 14E.2**

5 b $\begin{bmatrix} 78\,669.5 \\ 65\,589 \end{bmatrix}$ income from day 1
income from day 2

page 777 **Exercise 15B.2**



page 780 **Exercise 17C**

2 b $\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -2 \\ 6 \end{bmatrix} + \frac{t}{10} \begin{bmatrix} 20 \\ 15 \end{bmatrix}$

page 798 **Exercise 23C**

2 h $\frac{1}{x \ln x}$

ERRATA FOR SIXTH REPRINT

ANSWERS

page 786 **Exercise 19E.2**

4 b $\frac{5}{7}$