Third edition - 2013 first reprint

The following errata were made on 25/May/2016

page 209 **EXERCISE 11B** question **4,** should not give population as a measure of years:

4 $P(t) = 400 + 250 \sin\left(\frac{\pi t}{2}\right)$

page 290 **REVIEW SET 14A** question **1 c,** should read:

1 **c** $\lim\limits_{x \to 4} \dfrac{x^2 - 16}{x - 4} = \lim\limits_{x \to 4} \dfrac{(x + 4)(x - 4)}{x - 4}$

$\qquad\qquad\qquad = \lim\limits_{x \to 4} (x + 4) \quad \{\text{as } x \neq 4\}$

$\qquad\qquad\qquad = 8$

page 322 **EXERCISE 16A** question **1 e,** should read:

1 **e** We seek the tangent to

$\qquad y = \dfrac{3}{x} - \dfrac{1}{x^2} = 3x^{-1} - x^{-2} \quad \text{at } (-1, -4).$

$\qquad \text{Now} \quad \dfrac{dy}{dx} = -3x^{-2} + 2x^{-3}$

$\qquad\qquad\qquad = -\dfrac{3}{x^2} + \dfrac{2}{x^3} \quad \text{so at } (-1, -4).$

$\qquad \dfrac{dy}{dx} = -\dfrac{3}{(-1)^2} + \dfrac{2}{(-1)^3}$

$\qquad\qquad = -3 - 2$

$\qquad\qquad = -5$

$\qquad \therefore \quad$ the tangent has equation

$\qquad\qquad \dfrac{y - (-4)}{x - (-1)} = -5$

$\qquad\qquad \therefore \quad y + 4 = -5x - 5$

$\qquad\qquad\qquad \therefore \quad y = -5x - 9$

The following errata were made on or before 16/Feb/2016

page 139 **EXERCISE 6F** question **3 c,** should read:

3 **c** $\sum\limits_{k=1}^{20} \left(\dfrac{k + 3}{2}\right) = 2 + \frac{5}{2} + 3 + \dots + \frac{23}{2}$

$\qquad$ This series is arithmetic with $\quad u_1 = 2, \quad d = \frac{1}{2}, \quad$ and $\quad n = 20.$

$\qquad \therefore \quad \text{sum} = \dfrac{n}{2}\,[2u_1 + (n - 1)d] = \frac{20}{2}[4 + 19 \times \frac{1}{2}] = 135$
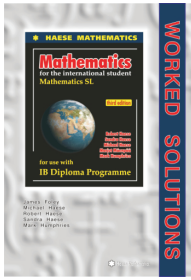
ERRATA

MATHEMATICS FOR THE INTERNATIONAL STUDENT

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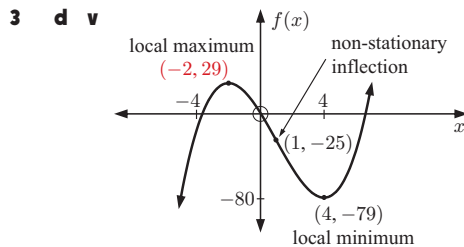page 186 **EXERCISE 9D** question **9,** should read:

9 Using Pythagoras' theorem
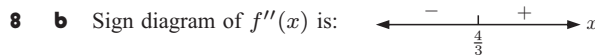
$$RQ = \sqrt{4^2 + 7^2} = \sqrt{65} \text{ cm}$$

page 228 **EXERCISE 12E** question **4 h,** should read:

4 **h** $2\mathbf{p} - \mathbf{q} + \frac{1}{3}\mathbf{r} = \begin{pmatrix} 2 \\ 10 \end{pmatrix} - \begin{pmatrix} -2 \\ 4 \end{pmatrix} + \begin{pmatrix} -1 \\ -\frac{1}{3} \end{pmatrix}$
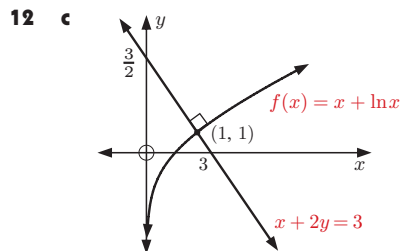
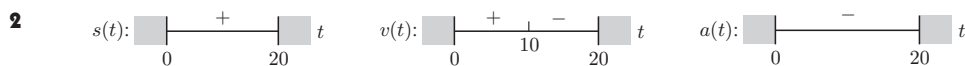page 342 **EXERCISE 16D.1** question **3 d v,** diagram should have correct local maximum:

3 **d** **v**

page 358 **REVIEW SET 16C** question **8 b,** should include sign diagram:

8 **b** Sign diagram of $f''(x)$ is:

page 360 **REVIEW SET 16C** question **12 c,** should have properly labelled functions:

12 **c**

page 363 **EXERCISE 17A.2** question **2,** should have sign diagrams on the interval from 0 to 20:

2

page 439 **EXERCISE 20B.1** question **16,** should have diagram shown:

16 Possibilities are:

a	5	6	7	8
b	11	10	9	8

reject as modes are 8 and 9
reject as modes are 9 and 10
reject as modes are 5 and 9

So, the missing results are 7 and 9.

page 508 **REVIEW SET 23B** question **1,** disregard part **d.**