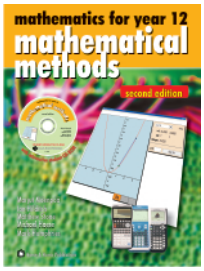


ERRATA

MATHEMATICAL METHODS (Second edition)

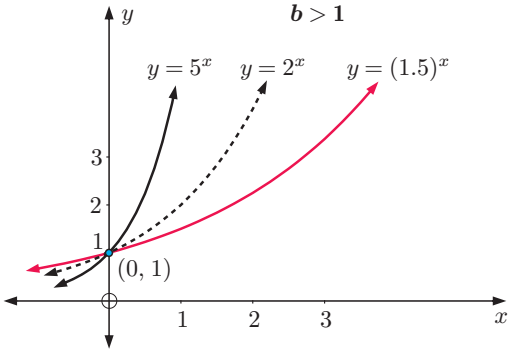
MATHEMATICS FOR YEAR 12

Second edition - 2010 initial print run

page 112 **REVIEW SET 2A**

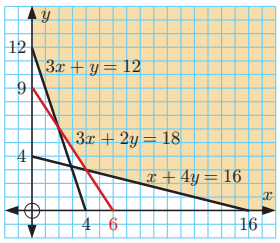
1 A discrete random variable X has probability distribution function $P(X = x) = k\left(\frac{3}{4}\right)^x \left(\frac{1}{4}\right)^{3-x}$ where $x = 0,\ 1,\ 2,\ 3$ and k is a constant.

page 145 **TEXT** change point label on the diagram to $(0,\ 1)$:



page 360 **ANSWERS, EXERCISE 7A.3** question **8c** should have 6 on the x-axis placed correctly:

8 **c**



Vertices are $(0,\ 12)$, $(2,\ 6)$, $(4,\ 3)$ and $(16,\ 0)$.

page 361 **ANSWERS, EXERCISE 7B** should read:

EXERCISE 7B

1 $x + y \leqslant 50,\ 80x + 120y \leqslant 4800,\ x \geqslant 0,\ y \geqslant 0$

2 $5x + y \leqslant 15,\ x + 4y \leqslant 12,\ x \geqslant 0,\ y \geqslant 0$

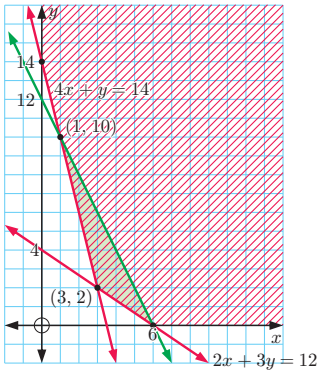
3 $8x + 6y \leqslant 50$ {area planted must be at most 50 ha},
$x + y \leqslant 7$ {planting must be for no more than 7 days},
$x \geqslant 0,\ y \geqslant 0$ {cannot be a negative number of planting}

4 $10x + 40y \geqslant 120,\ 30x + 30y \geqslant 180,\ 500x + 100y \geqslant 1000,$
$x \geqslant 0,\ y \geqslant 0$

5 $4x + 3y \geqslant 20,\ 3x + 5y \geqslant 18,\ x \geqslant 0,\ y \geqslant 0$

page 361 **ANSWERS, EXERCISE 7C.1** question 3 should read:

3 **a**, **d i**



(Diagram should have y intercept at 14 labelled and should not have shading where $x < 0$)

b **i** 6 at (6, 0)

ii 22 at (3, 2)

iii 14 at (0, 14)

iv 0 at (0, 14)

page 362 **ANSWERS, EXERCISE 7C.5** question 3 should read:

3 **a** $8\frac{4}{7}$ tonnes of A, $27\frac{1}{7}$ tonnes of B, profit $= \$3180$

b **i** \$3108

ii 10 tonnes of A, 25 tonnes of B, profit $= \$3150$

page 362 **ANSWERS, REVIEW SET 7A** questions 2 and 4 should read:

2 **a** 6 gas meters, 3 water meters

b **i** 4 gas meters, 7 water meters **ii** \$84

4 **a** $y \geqslant 1$, $3x - 4y \leqslant -4$, $7x + 5y \leqslant 35$