Pocket answer section for
SQA Mathematics Standard Grade Credit Level
1999, 2000 and 2001

Mathematics
Credit Level
1999

1. £12 000

2. $2 \cdot 4 \times 10^5$

3. $x < \frac{2}{3}$

4. DG = 35·5 km

5. $T = \frac{1}{2}S - 2$

6. $(3x + 1)(x - 2)$

7. (a) £26·95

    (b) $C = 12 \cdot 25 + 0 \cdot 35t$

8. (a) 3, 7, 10

    (b) $S_6 = -4$

    (c) $[p] + [q] + [p + q] + [p + 2q] +$
         $[2p + 3q] + [3p + 5q] = 8p + 12q$
         $= 4(2p + 3q) = 4 \times 5^{\text{th}}$ term

9. 367·45 cm

10. $0 \cdot 45 \, \text{m}^3$

11. 2·7 litres

12. $x = 221 \cdot 8, 318 \cdot 2$

13. (a) $2x + 3y = 580$

    (b) $x + y = 250$

    (c) $x = 170$

14. 9·38 m

15. (a) $x + x + \text{BC} + \text{CD} = 6$
         $2\text{BC} = 6 - 2x$
         $\text{BC} = 3 - x$

    (b) $x(3 - x) + x(3 - x - x)$
         $= 3x - x^2 + 3x - x^2 - x^2$
         $= 6x - 3x^2$

    (c) $A(1) = 3\text{m}^2$

16. (a) $4\sqrt{2}$

    (b) $a^{-3} + 4a^2$

    (c) $x^3 + x^2 - 10x + 8$

17. (a) 32·7 m

    (b) length of side $= l$
         $2l^2 = (32 \cdot 7)^2$
         $l = 23 \cdot 122$
         $l \approx 23 \, \text{m}$

18. (a) $f(4) = 81$

    (b) $x = 3/2$

19. (a) $d = kt^2$ or $\dfrac{d}{t^2}$ is a constant

    (b) $d = 5t^2$

    (c) distance is multiplied by 36

Mathematics
Credit Level
2000

1. 3410

2. $2 \cdot 36 \times 10^{-2}$

3. $V = \frac{3}{4}t + 5$