

# Figure it Out 5 — Answers

## 1. Revision

### Mental Computation

- (page 1)
- |        |        |        |
|--------|--------|--------|
| 1. 47  | 2. 66  | 3. 97  |
| 4. 47  | 5. 59  | 6. 72  |
| 7. 61  | 8. 78  | 9. 98  |
| 10. 9  | 11. 10 | 12. 6  |
| 13. 15 | 14. 20 | 15. 16 |

### Written Computation

- |          |           |           |           |           |
|----------|-----------|-----------|-----------|-----------|
| 1. 772   | 2. 8789   | 3. €80·83 | 4. €86·83 | 5. 157    |
| 6. 1779  | 7. €17·67 | 8. €33·78 | 9. 3066   | 10. 4536  |
| 11. 4764 | 12. 5274  | 13. 6815  | 14. 9324  | 15. 5688  |
| 16. 7332 | 17. 189   | 18. 136   | 19. 97R3  | 20. 121R7 |

### Mental Problems

- (page 2)
- |          |          |           |
|----------|----------|-----------|
| 1. 219   | 2. 125   | 3. €6·80  |
| 4. €2·60 | 5. €1·60 | 6. €9     |
| 7. 70    | 8. 49    | 9. 82     |
| 10. 64   | 11. 48   | 12. €6·90 |

### Written Problems

- (page 3)
- |           |           |           |
|-----------|-----------|-----------|
| 1. 5241   | 2. 2886   | 3. €6·57  |
| 4. 2142   | 5. 57     | 6. 1728   |
| 7. €18·87 | 8. €62·80 | 9. €9·08  |
| 10. 384   | 11. €6·35 | 12. €3·94 |

## 2. Revision

### Mental Computation

- (page 4)
- |           |            |             |
|-----------|------------|-------------|
| 1. 1725   | 2. 2947    | 3. 8250     |
| 4. 1476   | 5. 3275    | 6. 3950     |
| 7. €1·55  | 8. 225cm   | 9. 2700m    |
| 10. 3280g | 11. 2300ml | 12. 150mins |
| 13. 12    | 14. 42     | 15. 105mins |

### Written Computation

- |             |                |            |
|-------------|----------------|------------|
| 1. €26·34   | 2. €61·44      | 3. €61·56  |
| 4. €68·46   | 5. 57·78km     | 6. 74·45kg |
| 7. 72·60l   | 8. 6hrs 45mins | 9. 27·66km |
| 10. 34·78kg | 11. 32·87l     | 12. €43·62 |
| 13. 7532    | 14. 6545       | 15. 6786   |
| 16. 9546    | 17. €1·57      | 18. 1·79km |
| 19. 1·43kg  | 20. 1·37l      |            |

### Mental Problems

- (page 5)
- |          |          |          |
|----------|----------|----------|
| 1. €1·65 | 2. 40    | 3. 27    |
| 4. 350ml | 5. 700g  | 6. 200m  |
| 7. €18   | 8. 60    | 9. 0·55  |
| 10. 4:25 | 11. 48cm | 12. €200 |

### Written Problems

- (page 6)
- |           |        |           |
|-----------|--------|-----------|
| 1. 4995   | 2. 480 | 3. 8·03kg |
| 4. 8·08km | 5. 333 | 6. 18·55l |

7. €11.71  
10. 1968

8. 1.46m  
11. 476m<sup>2</sup>

9. 6:10  
12. €19.62

### 3. Large Numbers

#### Mental Computation

(page 7)	1. 3700	2. 4790	3. 6864
	4. 2570	5. 5930	6. 3357
	7. 3540	8. 9600	9. 12400
	10. 19476	11. 27389	12. 46873
	13. 87596	14. 72540	15. 88735

#### Written Computation

	1. 43199	2. 62726	3. 60592	4. 86222
	5. 74542	6. 69568	7. 79022	8. 81766
	9. 93714	10. 82726	11. 83739	12. 87849
	13. 28893	14. 24667	15. 25695	16. 24585
(page 8)	17. 27808	18. 23845	19. 29087	20. 43729

#### Mental Problems

1. 37485	2. 60000	3. 21467
4. 19345	5. 86519	6. 97532
7. 34678	8. 21467	9. 76000
10. 38760	11. 59760	12. 3700

#### Written Problems

(page 9)	1. 56497	2. 15777	3. 24287
	4. 14657	5. 18758	6. 62813
	7. 4076	8. 8690	9. 4483
	10. 32241	11. 48905	12. 63954

### 4. Multiplication

#### Mental Computation

(page 10)	1. 79	2. 51	3. 53	4. 49
	5. 55	6. 58	7. 380	8. 1570
	9. 6790	10. 240	11. 320	12. 460
	13. 330	14. 600	15. 900	

#### Written Computation

1. 5934	2. 33731	3. 37583	4. 3724
5. 22320	6. 28234	7. 39624	8. 60651
9. 54672	10. 81098	11. 73602	12. 87246
13. 89186	14. 84873	15. 79317	16. 86564
17. 96406	18. 81042	19. 93462	20. 92943

#### Mental Problems

(page 11)	1. 1780	2. 275	3. 19	4. 30
	5. 108	6. 28	7. 18	8. 93
	9. 560	10. 100	11. 8	12. 2360

**Written Problems**

- (page 12) 1. 40872      2. 27244      3. 25233      4. 7228  
 5. 11194      6. 824      7. 1216      8. 1036  
 9. 12816      10. 248      11. 3848      12. 7796

**5. 2-D Shapes**

- (page 13) 1. (a) circle      (b) triangle      (c) semi-circle      (d) pentagon  
 (e) rhombus      (f) hexagon      (g) parallelogram      (h) octagon  
 2. (a) square      (b) rectangle      (c) pentagon      (d) hexagon  
 (e) eight  
 3. (a) isosceles      (b) scalene      (c) equilateral  
 (page 14) 4. (a) true      (b) true      (c) false      (d) true  
 (a) true      (b) false      (c) true      (d) true

5.

	no. of sides	no. of angles	right angles	acute	obtuse	axes of symmetry
rectangle	4	4	4	0	0	2
rhombus	4	4	0	2	2	2
parallelogram	4	4	0	2	2	0
square	4	4	4	0	0	4
equilateral triangle	3	3	0	3	0	3
regular pentagon	5	5	0	0	5	5
regular hexagon	6	6	0	0	6	6
regular octagon	8	8	0	0	8	8

- (page 15) 6. (a) rectangles      (b) hexagons      (c) equilateral triangles  
 7. (a) true      (b) false      (c) true      (d) true  
 8. (a) (b) (c) Graphic

**6. Division**

**Mental Computation**

- (page 16) 1. 9      2. 8      3. 6      4. 8R3      5. 7R8  
 6. 9R3      7. 9      8. 30      9. 18      10. 16R5  
 11. 24R8      12. 36R7      13. 8      14. 12      15. 19

**Written Computation (A)**

1. 156R1      2. 71R8      3. 124R5      4. 120R7      5. 8R13  
 6. 7R7      7. 7R16      8. 7R50      9. 23R24      10. 24R3  
 11. 31R9      12. 30R19      13. 25R10      14. 32R20      15. 24R21  
 16. 21R33      17. 13R51      18. 15R42      19. 23R21      20. 16R10

**Written Computation (B)**

- (page 17) 1. 16R10      2. 16R13      3. 15R17      4. 11R41      5. 13R17  
 6. 13R34      7. 17R47      8. 21R2      9. 22      10. 22R22  
 11. 22R9      12. 24R25      13. 31R8      14. 25R9      15. 23R24  
 16. 40R6      17. 41R12      18. 13R37

**Written Problems**

- (page 18) 1. 9                      2. 15                      3. 18                      4. 28                      5. 25R5  
                   6. 19R18                      7. 24R27                      8. 36R18                      9. 19R11                      10. 17R21  
                   11. 47                      12. 38

**7. Fractions 1**

**Mental Computation (A)**

- (page 19) 1.  $\frac{4}{8}$                       2.  $\frac{6}{8}$                       3.  $\frac{4}{12}$                       4.  $\frac{4}{6}$   
                   5.  $\frac{8}{12}$                       6.  $\frac{2}{12}$                       7.  $\frac{10}{12}$                       8.  $\frac{6}{12}$   
                   9.  $\frac{5}{10}$                       10.  $\frac{3}{12}$                       11.  $\frac{3}{9}$                       12.  $\frac{6}{9}$   
                   13.  $\frac{2}{10}$                       14.  $\frac{6}{10}$                       15.  $\frac{8}{10}$                       16.  $\frac{9}{12}$

**Mental Computation (B)**

1.  $1\frac{1}{2}$                       2.  $1\frac{3}{8}$                       3.  $2\frac{3}{5}$                       4.  $1\frac{8}{9}$                       5.  $3\frac{1}{4}$   
                   6.  $3\frac{7}{10}$                       7.  $3\frac{5}{6}$                       8.  $2\frac{11}{12}$                       9.  $3\frac{3}{5}$                       10.  $4\frac{5}{8}$   
                   11.  $4\frac{7}{9}$                       12.  $8\frac{2}{3}$                       13.  $\frac{7}{4}$                       14.  $\frac{16}{9}$                       15.  $\frac{8}{3}$   
                   16.  $\frac{23}{8}$                       17.  $\frac{14}{5}$                       18.  $\frac{26}{9}$                       19.  $\frac{19}{6}$                       20.  $\frac{15}{2}$   
                   21.  $\frac{69}{10}$                       22.  $\frac{31}{12}$                       23.  $\frac{47}{8}$                       24.  $\frac{39}{4}$                       25.  $\frac{47}{6}$   
                   26.  $\frac{43}{5}$                       27.  $\frac{61}{9}$                       28.  $\frac{33}{7}$

**Written Computation (A)**

- (page 20) 1.  $\frac{3}{4}$                       2.  $\frac{5}{8}$                       3.  $\frac{5}{6}$                       4.  $\frac{2}{3}$                       5.  $1\frac{1}{6}$   
                   6.  $1\frac{1}{8}$                       7.  $\frac{2}{3}$                       8.  $1\frac{1}{9}$                       9.  $1\frac{1}{2}$                       10.  $1\frac{5}{12}$   
                   11.  $1\frac{1}{6}$                       12.  $1\frac{7}{12}$                       13.  $1\frac{5}{9}$                       14.  $1\frac{3}{4}$                       15.  $1\frac{7}{10}$   
                   16.  $1\frac{3}{8}$                       17.  $1\frac{5}{12}$                       18.  $1\frac{5}{8}$                       19.  $1\frac{1}{4}$                       20.  $1\frac{1}{3}$   
                   21.  $1\frac{1}{12}$

**Written Computation (B)**

- (page 20) 1.  $\frac{1}{4}$                       2.  $\frac{5}{8}$                       3.  $\frac{2}{9}$                       4.  $\frac{1}{8}$                       5.  $\frac{5}{12}$   
                   6.  $\frac{2}{9}$                       7.  $\frac{3}{4}$                       8.  $\frac{3}{8}$                       9.  $\frac{3}{10}$                       10.  $\frac{1}{4}$   
                   11.  $\frac{2}{3}$                       12.  $\frac{2}{9}$                       13.  $\frac{3}{10}$                       14.  $\frac{2}{5}$                       15.  $\frac{1}{2}$   
                   16.  $\frac{5}{12}$                       17.  $\frac{5}{12}$                       18.  $\frac{1}{4}$                       19.  $\frac{1}{5}$                       20.  $\frac{1}{6}$   
                   21.  $\frac{4}{9}$

**Mental Problems**

- (page 21) 1.  $\frac{5}{12}$                       2.  $\frac{7}{10}$                       3.  $\frac{2}{3}$                       4.  $\frac{3}{4}$                       5. 20  
                   6. 50                      7. €45                      8. 27                      9.  $\frac{5}{12}$                       10. 64  
                   11. 11                      12. 16

## 8. Fractions 2

### Mental Computation

- (page 22)
- $\frac{1}{3}$     $\frac{2}{3}$     $1\frac{1}{3}$     $2\frac{1}{3}$     $2\frac{2}{3}$     $3\frac{1}{3}$
  - $\frac{1}{4}$     $\frac{1}{2}$     $\frac{3}{4}$     $1\frac{1}{2}$     $1\frac{3}{4}$     $2\frac{1}{4}$     $2\frac{1}{2}$     $3$
  - $\frac{1}{6}$     $\frac{1}{3}$     $\frac{5}{12}$     $1\frac{1}{2}$     $2\frac{2}{3}$     $3\frac{3}{4}$     $5\frac{5}{6}$     $11\frac{11}{12}$     $11\frac{1}{12}$     $1\frac{1}{4}$
  - $8\frac{1}{2}$     $5. 7\frac{1}{4}$     $6. 8\frac{5}{6}$     $7. 5\frac{6}{7}$     $8. 9\frac{5}{8}$
  - $7\frac{4}{9}$     $10. 3\frac{7}{12}$     $11. 9\frac{4}{5}$     $12. \frac{15}{4}$     $13. \frac{20}{3}$
  - $14. \frac{39}{5}$     $15. \frac{35}{4}$     $16. \frac{27}{7}$     $17. \frac{59}{6}$     $18. \frac{87}{10}$
  - $19. \frac{68}{9}$     $20. \frac{53}{12}$     $21. \frac{79}{9}$     $22. \frac{43}{12}$     $23. \frac{79}{8}$

### Written Computation (A)

- (page 23)
- $3\frac{3}{4}$     $2. 3\frac{7}{8}$     $3. 5\frac{5}{6}$     $4. 5\frac{7}{8}$     $5. 5\frac{7}{9}$
  - $6. 6\frac{9}{10}$     $7. 5\frac{2}{3}$     $8. 5\frac{4}{5}$     $9. 4\frac{1}{3}$     $10. 5\frac{1}{10}$
  - $11. 6\frac{1}{3}$     $12. 6\frac{1}{6}$     $13. 3\frac{1}{12}$     $14. 1\frac{3}{8}$     $15. 3\frac{3}{10}$
  - $16. 3\frac{1}{2}$     $17. 2\frac{1}{3}$     $18. 2\frac{1}{6}$     $19. 2\frac{7}{8}$     $20. 2\frac{11}{12}$
  - $21. 2\frac{7}{8}$     $22. 2\frac{1}{2}$     $23. 4\frac{2}{3}$     $24. 1\frac{2}{3}$

### Written Computation (B)

- $\frac{2}{3}$     $2. \frac{3}{4}$     $3. \frac{5}{6}$     $4. \frac{1}{2}$     $5. \frac{1}{2}$
- $6. \frac{3}{4}$     $7. \frac{4}{5}$     $8. \frac{3}{4}$     $9. \frac{2}{3}$     $10. 1\frac{2}{3}$
- $11. 2\frac{1}{4}$     $12. 2\frac{1}{5}$     $13. 1\frac{1}{2}$     $14. 3\frac{3}{3}$     $15. 4\frac{1}{2}$
- $16. 2\frac{4}{5}$     $17. 2\frac{1}{2}$     $18. 3\frac{1}{3}$     $19. 1\frac{2}{3}$     $20. 3\frac{1}{2}$
- $21. 4\frac{1}{2}$

### Mental Problems

- (page 24)
- $\frac{2}{3}$     $2. \frac{3}{8}$     $3. \frac{5}{6}$     $4. 36$     $5. \frac{7}{12}$
  - $6. 72$     $7. 14$     $8. €25$     $9. 3$     $10. 4$
  - $11. 15$     $12. 20$

### Written Problems

- (page 25)
- $\frac{5}{8}$     $2. \frac{7}{8}$     $3. \frac{5}{6}$     $4. 2\frac{1}{4}$     $5. 4\frac{1}{8}$
  - $6. 8\frac{1}{2}$     $7. 1\frac{5}{8}$     $8. 2\frac{7}{9}$     $9. 2\frac{2}{3}$     $10. 3\frac{3}{4}$
  - $11. 4\frac{3}{8}$     $12. 60$

## 9. Test Yourself 1

### Mental Computation

- (page 26)
- $2800$     $2. 7865$     $3. 6590$     $4. 5328$     $5. 5316$
  - $6. 4462$     $7. 2870$     $8. 340$     $9. 680$     $10. 9R5$
  - $11. 9R7$     $12. 9$     $13. \frac{8}{12}$     $14. \frac{3}{8}$     $15. \frac{8}{9}$

### Written Computation

- $73252$     $2. 70283$     $3. 76271$     $4. 80270$     $5. 30668$
- $6. 25468$     $7. 32877$     $8. 17725$     $9. 59808$     $10. 72446$
- $11. 86043$     $12. 80028$     $13. 25R32$     $14. 18R21$     $15. 17R9$

Figure it Out 5 — answers

16. 14R26    17. 33R3    18. 21R26    19. 37R1    20. 34R19  
 21.  $3\frac{5}{8}$     22.  $6\frac{1}{5}$     23.  $6\frac{1}{6}$     24.  $4\frac{1}{2}$     25.  $3\frac{2}{3}$   
 26.  $2\frac{2}{3}$

**Mental Problems**

- (page 27) 1. 49613    2. 70000    3. 17628  
 4. 21593    5. 540    6. 50  
 7. 1780    8. 9R7    9. 7  
 10. 50    11.  $3\frac{3}{4}$     12.  $2\frac{2}{3}$

**Written Problems**

- (page 28) 1. 57733    2. 18878    3. 8484  
 4. 24388    5. 9072    6. 3512  
 7. 17    8. 26R22    9. 58  
 10.  $6\frac{3}{8}$     11.  $2\frac{5}{9}$     12.  $5\frac{5}{8}$

**10. Decimals 1**

**Activity page**

- (page 29) 1. 0.3    2. 0.7    3. 0.9    4. 0.09    5. 0.23    6. 0.36

Questions 7, 8, 9, Graphics

10. 

0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.2
-----	-----	-----	-----	-----	-----	-----	-----

  
 11. 

4.2	4.4	4.5	4.7	4.8	4.9	5.1	5.2
-----	-----	-----	-----	-----	-----	-----	-----

  
 12. 

0.03	0.04	0.05	0.07	0.08	0.09	0.1
------	------	------	------	------	------	-----

**Mental Computation (A)**

- (page 30) 1. 1.1    2. 1.9    3. 2.3    4. 4.7    5. 1.01  
 6. 2.03    7. 4.07    8. 7.09    9. 1.13    10. 3.27  
 11. 5.49    12. 6.87    13. 1.79    14. 2.38    15. 3.17  
 16. 6.93    17. 1.7    18. 4.9    19. 1.37    20. 2.09

**Mental Computation (B)**

1.  $\frac{7}{10}$     2.  $\frac{9}{10}$     3.  $1\frac{3}{10}$     4.  $2\frac{1}{10}$     5.  $\frac{3}{100}$   
 6.  $1\frac{7}{100}$     7.  $3\frac{9}{100}$     8.  $5\frac{3}{100}$     9.  $\frac{17}{100}$     10.  $\frac{23}{100}$   
 11.  $\frac{49}{100}$     12.  $\frac{83}{100}$     13.  $2\frac{19}{100}$     14.  $3\frac{47}{100}$     15.  $4\frac{23}{100}$   
 16.  $8\frac{67}{100}$     17.  $\frac{7}{10}$     18.  $\frac{9}{100}$     19.  $\frac{3}{10}$     20.  $\frac{4}{100}$

**Written Computation (A)**

- (page 30) 1. 78.01    2. 88.98    3. 73.51    4. 81.07  
 (page 31) 5. 37.65    6. 50.62    7. 22.57    8. 46.47  
 9. 141.36    10. 243.74    11. 282.45    12. 581.44  
 13. 18.9    14. 18.9    15. 6.4    16. 11.7  
 17. 2.45    18. 1.38    19. 0.88    20. 1.39

**Written Computation (B)**

1. 77.22    2. 82.84    3. 78.8    4. 74.16    5. 75.45    6. 77.86

**Mental Problems**

- (page 32) 1. 18    2. 42    3. 72    4. 0.5    5. 0.87    6. 0.93  
 7. 0.07    8. 3.74    9. €1.50    10. 3.67    11. €120    12. 90

**Written Problems**

- (page 33) 1. 53.33    2. 18.87    3. 980    4. 116    5. €94.80    6. 388  
 7. 380    8. 130km    9. 69.93    10. 230    11. €53.46    12. €13.95

**11. Decimals 2**

**Mental Computation (A)**

- (page 34) 1. 0.001    2. 0.007    3. 0.009    4. 0.003    5. 0.013  
 6. 0.029    7. 0.037    8. 0.041    9. 0.063    10. 0.079  
 11. 0.087    12. 0.093    13. 0.127    14. 0.173    15. 0.189  
 16. 0.197    17. 0.269    18. 0.341    19. 0.463    20. 0.729

**Mental Computation (B)**

1.  $\frac{4}{1000}$     2.  $\frac{8}{1000}$     3.  $\frac{19}{1000}$     4.  $\frac{48}{1000}$     5.  $\frac{76}{1000}$   
 6.  $\frac{139}{1000}$     7.  $\frac{287}{1000}$     8.  $\frac{639}{1000}$     9.  $1\frac{9}{1000}$     10.  $1\frac{38}{1000}$   
 11.  $2\frac{79}{1000}$     12.  $4\frac{83}{1000}$     13.  $2\frac{137}{1000}$     14.  $3\frac{259}{1000}$     15.  $6\frac{417}{1000}$   
 16.  $8\frac{763}{1000}$     17. 3.791    18. 4.384    19. 5.807    20. 8.039  
 21.  $\frac{7}{1000}$     22.  $\frac{3}{100}$     23.  $\frac{9}{1000}$     24.  $\frac{8}{1000}$

**Written Computation (A)**

- (page 35) 1. 9.876    2. 13.288    3. 16.239    4. 23.302    5. 74.674  
 6. 75.420    7. 81.019    8. 81.843    9. 23.027    10. 42.966  
 11. 18.666    12. 35.729    13. 24.395    14. 52.776    15. 55.698  
 16. 68.922    17. 0.122    18. 0.119    19. 0.159    20. 0.239

**Written Computation (B)**

- (page 36) 1. 6.380    2. 8.286    3. 8.280  
 4. 8.359    5. 6.396    6. 4.212

**Mental Problems**

1. 0.47    2. 0.72    3. 0.357    4. 0.875    5. 0.037    6. 0.258  
 7. 3.457    8. 90c    9. 0.215    10. 0.016    11. €80    12. 0.325

**Written Problems**

- (page 37) 1. 16.916    2. 8.778    3. 8.868    4. 6.586    5. 3.637    6. 456  
 7. €300    8. 270    9. 0.752    10. 7.992    11. 0.683    12. 0.594

**12. Lines and Angles**

- (page 38) 1. (a) acute    (b) obtuse    (c) right  
 (d) reflex    (e) obtuse    (f) straight  
 2. (a) (i) obtuse    (b) (i) reflex    (c) (i) acute  
 (ii) reflex    (ii) right    (ii) reflex  
 3. (a) straight    (b) right and reflex    (c) obtuse and reflex  
 (d) acute and reflex  
 (page 39) 4. (a) 180°    (b) 90°  
 5. (a) 50°    (b) 60°    (c) 75°  
 (a) 120°    (b) 125°    (c) 150°  
 (page 40) 6. (a), (b), (c), (d), Graphics  
 7. (a) 60°, 60°, 60°    (b) 80°, 50°, 50°    (c) 70°, 70°, 40°  
 (a) 180°    (b) 180°    (c) 180°  
 (d) 180°    (e) two  
 (page 41) 8. (a) 70°    (b) 35°    (c) 53°  
 9. (a) 125°    (b) 155°    (c) 106°

10. (a)  $180^\circ$  (b)  $135^\circ$  (c) SW  
 (d) W (e)  $135^\circ$

### 13. Number Theory

- (page 42) 1. 2, 5, 13, 29 2. 6, 9, 18, 27  
 3. 2, 3, 5, 7, 11, 13, 17, 19 4. 4, 6, 8, 9, 10, 12, 14  
 (page 43) 5. 31, 37, 41, 43 6. 60, 63, 65, 69  
 7. (a) false (b) false  
 8. (a) even (b) even (c) odd (d) even (e) odd (f) even  
 9. 1, 9, 16, 25 10. 36, 49, 64, 81, 100 11. 16  
 12. (a) 36 (b) 49 (c) 64 (d) 81 (e) 100  
 13. 50, 51, 55, 57  
 14. 39, 49, 75, 81

### 14. Percentages

#### Mental Computation (A)

- (page 44) 1. (a) (i)  $\frac{23}{100}$ , (ii) 23% (b) (i)  $\frac{37}{100}$ , (ii) 37% (c) (i)  $\frac{53}{100}$ , (ii) 53%  
 2. Graphics  
 3.  $\frac{10}{100} = 10\%$  4.  $\frac{20}{100} = 20\%$  5.  $\frac{30}{100} = 30\%$  6.  $\frac{50}{100} = 50\%$   
 7.  $\frac{70}{100} = 70\%$  8.  $\frac{80}{100} = 80\%$  9.  $\frac{90}{100} = 90\%$  10.  $\frac{100}{100} = 100\%$   
 11.  $\frac{19}{100} = 19\%$  12.  $\frac{37}{100} = 37\%$  13.  $\frac{58}{100} = 58\%$  14.  $\frac{79}{100} = 79\%$

#### Mental Computation (B)

- (page 45) 1.  $\frac{1}{10} + \frac{3}{100}$  2.  $\frac{1}{10} + \frac{7}{100}$  3.  $\frac{2}{10} + \frac{9}{100}$  4.  $\frac{4}{10} + \frac{1}{100}$   
 5.  $\frac{7}{10} + \frac{3}{100}$  6.  $\frac{9}{10} + \frac{7}{100}$   
 7. 20%, 30%, 40%, 50%, 70%, 80%, 90% 100%  
 8.  $\frac{20}{100} = 20\%$  9.  $\frac{40}{100} = 40\%$  10.  $\frac{6}{100} = 60\%$  11.  $\frac{80}{100} = 80\%$   
 12.  $\frac{50}{100} = 50\%$  13.  $\frac{25}{100} = 25\%$  14.  $\frac{75}{100} = 75\%$  15.  $\frac{5}{100} = 5\%$   
 16.  $\frac{15}{100} = 15\%$  17.  $\frac{35}{100} = 35\%$  18. 50% 19. 20%  
 20. 30% 21. 25% 22. 15% 23. 30%  
 24. 10% 25. 5%

#### Written Problems (A)

- (page 46) 1. 37% 2. 40% 3. 30% 4. 50% 5. 25% 6. 75%  
 7. 18 8. 63 9. €35 10. 80 11. 25% 12. €75

#### Mental Problems (B)

- (page 47) 1. 15% 2. €12 3. 15% 4. 35% 5. €27 6. 40%  
 7. 18 8. 36 9. 120 10. 60% 11. 28 12. €55

### 15. Fractions, Decimals and Percentages

#### Mental Computation (A)

- (page 48) 1.  $\frac{3}{10} = 30\%$  2.  $\frac{7}{10} = 70\%$  3.  $\frac{9}{10} = 90\%$  4.  $\frac{1}{10} = 10\%$   
 5.  $\frac{13}{100} = 13\%$  6.  $\frac{19}{100} = 19\%$  7.  $\frac{27}{100} = 27\%$  8.  $\frac{39}{100} = 39\%$   
 9.  $\frac{53}{100} = 53\%$  10.  $\frac{89}{100} = 89\%$   
 11. 0.17 12. 0.23 13. 0.36 14. 0.47



15. 0.54      16. 0.69      17. 0.78      18. 0.95  
 19. 18%      20. 24%      21. 63%      22. 75%  
 23. 91%      24. 90%      25. 9%      26. 3%  
 27.  $\frac{13}{100}$ , 0.13, 13%      28.  $\frac{27}{100}$ , 0.27, 27%  
 29.  $\frac{39}{100}$ , 0.39, 39%      30.  $\frac{57}{100}$ , 0.57, 57%

**Mental Computation (B)**

- (page 49) 1.  $0.07 = 7\%$       2.  $0.09 = 9\%$       3.  $0.5 = 50\%$       4.  $0.25 = 25\%$   
 5.  $0.75 = 75\%$       6.  $0.2 = 20\%$       7.  $0.4 = 40\%$       8.  $0.6 = 60\%$   
 9.  $0.8 = 80\%$       10.  $0.05 = 5\%$       11.  $0.15 = 15\%$       12.  $0.35 = 35\%$   
 13.  $0.45 = 45\%$       14.  $0.55 = 55\%$       15.  $0.02 = 2\%$       16.  $0.04 = 4\%$

17.

Fraction	$\frac{27}{100}$	$\frac{43}{100}$	$\frac{9}{100}$	$\frac{4}{5}$	$\frac{1}{5}$	$\frac{1}{2}$
Decimal	0.27	0.43	0.09	0.8	0.2	0.5
Percentage	27%	43%	9%	80%	20%	50%

18. 7      19. 6      20. 12      21. 8  
 22. 9      23. 10      24. 2      25. 21  
 26. 25%, 50%, 75%, 100%      27. 20%, 40%, 60%, 80%, 100%  
 28. 19%,  $\frac{1}{5}$ , 0.21      29.  $\frac{3}{5}$ , 0.65, 68%      30.  $\frac{3}{4}$ , 78%, 0.8

**Written Computation (A)**

- (page 50) 1. 141      2. 74      3. 292      4. 84      5. 252      6. 378  
 7. 51      8. 371      9. 612      10. 68      11. 196      12. 336  
 13. 77      14. 69      15. 264      16. 71      17. 78      18. 255  
 19. 380      20. 507      21. 296      22. 513      23. 495      24. 702

**Written Computation (B)**

1. 517      2. 836      3. 1023      4. 300      5. 432      6. 576  
 7. 215      8. 320      9. 465      10. 357      11. 338      12. 578  
 13. 189      14. 392      15. 567      16. 144      17. 252      18. 306  
 19. 108      20. 207      21. 89      22. 196      23. 177      24. 166

**Mental Problems**

- (page 51) 1. 70%      2. 25      3. 140      4. 11      5. 80      6. €36  
 7. 40%      8. 66      9. 30      10. 24      11. 60      12. €48

**Written Problems**

- (page 52) 1. 741      2. 196      3. 222      4. 111      5. 108      6. €192  
 7. 276      8. 49km      9. 445      10. 679      11. €558      12. €204

**16. 3-D Shapes**

- (page 53) 1. (a) pyramid      (b) sphere      (c) cylinder      (d) cone  
 (e) cube      (f) cone      (g) cuboid      (h) triangular prism  
 2. (a) pyramid      (b) cube      (c) cylinder  
 (d) cuboid      (e) cone      (f) triangular prism  
 3. (a) 6, 12, 8      (b) 6, 12, 8      (c) 5, 8, 5      (d) 1, 0, 0  
 (e) 5, 9, 6      (f) 2, 1, 1      (g) 3, 2, 0  
 (page 54) 4. (a) pyramid      (b) cylinder      (c) cube  
 (d) cone      (e) cuboid      (f) triangular prism  
 5. (a) 6      (b) 4  
 6. (a) 7      (b) rectangles, pentagons      (c) 15, 10  
 7. (a) 8      (b) rectangles, hexagons      (c) 18, 12

**17. Time****Mental Computation**

- (page 55)
- |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| 1. 1hr 20mins   | 2. 1hr 45mins   | 3. 2hrs 10mins  | 4. 2hrs 30mins  |
| 5. 1hr 34mins   | 6. 1hr 48mins   | 7. 1hr 57mins   | 8. 2hrs 18mins  |
| 9. 85mins       | 10. 110mins     | 11. 125mins     | 12. 175mins     |
| 13. 97mins      | 14. 113mins     | 15. 136mins     | 16. 168mins     |
| 17. 3.30am      | 18. 8.15pm      | 19. 3.40pm      | 20. 11.35pm     |
| 21. 9.45am      | 22. 6.50pm      | 23. 06:30       | 24. 09:30       |
| 25. 14:15       | 26. 15:45       | 27. 19:28       | 28. 10:47       |
| 29. 21:53       | 30. 23:16       | 31. 5.20am      | 32. 5.35pm      |
| 33. 8.50pm      | 34. 10.28pm     | 35. 2hrs 15mins | 36. 2hrs 30mins |
| 37. 2hrs 15mins | 38. 2hrs 20mins | 39. 2hrs 30mins | 40. 2hrs 35mins |

**Written Computation (A)**

- (page 56)
- |                |                 |                 |                  |
|----------------|-----------------|-----------------|------------------|
| 1. 5hrs 45mins | 2. 5hrs 51mins  | 3. 7hrs 54mins  | 4. 8hrs 23mins   |
| 5. 2hrs 25mins | 6. 2hrs 48mins  | 7. 2hrs 28mins  | 8. 4hrs 53mins   |
| 9. 4hrs 45mins | 10. 5hrs 52mins | 11. 6hrs 25mins | 12. 14hrs 24mins |

**Written Computation (B)**

- |                |                 |                  |                 |
|----------------|-----------------|------------------|-----------------|
| 1. 7hrs 54mins | 2. 9hrs 11mins  | 3. 9hrs 21mins   | 4. 8hrs 02mins  |
| 5. 2hrs 46mins | 6. 4hrs 35mins  | 7. 3hrs 39mins   | 8. 4hrs 39mins  |
| 9. 9hrs 52mins | 10. 7hrs 48mins | 11. 12hrs 15mins | 12. 7hrs 48mins |

**Mental Problems**

- (page 57)
- |               |            |           |                 |
|---------------|------------|-----------|-----------------|
| 1. 75mins     | 2. 15:40   | 3. 08:45  | 4. 15:15        |
| 5. 12:10      | 6. 105mins | 7. 20:50  | 8. 3hrs 15mins  |
| 9. 1hr 45mins | 10. 14:40  | 11. 19:05 | 12. 3hrs 25mins |

**Written Problems**

- (page 58)
- |                |                 |                  |                |
|----------------|-----------------|------------------|----------------|
| 1. 2hrs 25mins | 2. 6hrs 45mins  | 3. 1hr 37mins    | 4. 18:19       |
| 5. 9.32am      | 6. 1hr 42mins   | 7. 2hrs 45mins   | 8. 4hrs 47mins |
| 9. 20:13       | 10. 7hrs 37mins | 11. 10hrs 45mins | 12. 1hr 57mins |

**18. Area and Perimeter****Mental Computation (A)**

- (page 59)
- |                     |                     |                     |                    |                     |
|---------------------|---------------------|---------------------|--------------------|---------------------|
| 1. $12\text{cm}^2$  | 2. $10\text{cm}^2$  | 3. $11\text{cm}^2$  | 4. $10\text{cm}^2$ | 5. $8\text{cm}^2$   |
| 6. $12\text{cm}^2$  | 7. $24\text{cm}^2$  | 8. $40\text{cm}^2$  | 9. $54\text{cm}^2$ | 10. $42\text{cm}^2$ |
| 11. $32\text{cm}^2$ | 12. $63\text{cm}^2$ | 13. $90\text{cm}^2$ | 14. 34cm           | 15. 32cm            |
| 16. 40cm            | 17. 42cm            |                     |                    |                     |

**Mental Computation (B)**

- (page 60)
- |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| 1. $24\text{m}^2$ | 2. $40\text{m}^2$ | 3. $45\text{m}^2$ | 4. $35\text{m}^2$ |
| 5. $54\text{m}^2$ | 6. $70\text{m}^2$ | 7. $72\text{m}^2$ | 8. 30m            |
| 9. 36m            | 10. 70m           | 11. 70m           |                   |

12.	Length	7m	6m	7m	8m	9m
	Width	3m	5m	5m	6m	7m
	Perimeter	20m	22m	24m	28m	32m
	Area	$21\text{m}^2$	$30\text{m}^2$	$35\text{m}^2$	$48\text{m}^2$	$63\text{m}^2$

**Written Computation**

- |                                  |                                  |
|----------------------------------|----------------------------------|
| 1. (i) $14\text{cm}^2$ (ii) 18cm | 2. (i) $19\text{cm}^2$ (ii) 28cm |
| 3. (i) $34\text{cm}^2$ (ii) 32cm | 4. (i) $23\text{cm}^2$ (ii) 24cm |

**Mental Problems**

- (page 61) 1.  $200\text{cm}^2$  2.  $24\text{cm}^2$  3.  $90\text{cm}$  4.  $120\text{m}$  5.  $6\text{cm}$  6.  $7\text{cm}$   
 7.  $64\text{cm}^2$  8.  $28\text{cm}$  9.  $81\text{cm}^2$  10.  $48\text{m}$  11.  $77\text{m}^2$  12.  $\text{€}600$

**Written Problems**

- (page 62) 1.  $600\text{cm}^2$  2.  $828\text{m}^2$  3.  $146\text{m}$  4.  $17\text{m}$  5.  $76\text{cm}$  6.  $324\text{cm}^2$   
 7.  $448\text{m}^2$  8.  $578\text{m}^2$  9.  $\text{€}864$  10.  $512\text{m}^2$  11.  $\text{€}960$  12.  $\text{€}588$

**19. Circle**

- (page 63) 1. (a) centre (b) circumference (c) radius (d) diameter  
 3. (a)  $96\text{cm}$  (b)  $26\text{cm}$  (c)  $84\text{cm}$

4.	8cm	16cm	48cm
	9cm	18cm	54cm

- (page 64) 5. (a)  $12\text{cm}^2$  (b)  $15\text{cm}^2$  (c)  $21\text{cm}^2$   
 6. Graphics  
 7. (a)  $27\text{cm}^2$  (approx) 2. (b)  $32\text{cm}^2$  (approx)  
 8. Graphics

**20. Money****Mental Computation**

- (page 65) 1.  $\text{€}2.60$  2.  $\text{€}5.75$  3.  $\text{€}6.32$  4.  $\text{€}13.50$  5.  $\text{€}11.85$   
 6.  $\text{€}15.63$  7.  $\text{€}16$  8.  $\text{€}8$  9.  $\text{€}21$  10.  $\text{€}35$   
 11.  $\text{€}15$  12.  $\text{€}30$  13.  $\text{€}18$  14.  $\text{€}56$  15.  $\text{€}12$   
 16.  $\text{€}8$  17.  $\text{€}27$  18.  $\text{€}9$  19.  $\text{€}24$  20.  $\text{€}43$   
 21.  $\text{€}7$  22.  $\text{€}18$  23.  $\text{€}2$  24.  $\text{€}15$  25.  $\text{€}33$   
 26.  $\text{€}60$  27.  $\text{€}30$  28.  $\text{€}36$  29.  $\text{€}15$  30.  $\text{€}9$

**Written Computation**

1.  $\text{€}77.81$  2.  $\text{€}82.01$  3.  $\text{€}74.31$  4.  $\text{€}81.41$   
 5.  $\text{€}34.79$  6.  $\text{€}36.49$  7.  $\text{€}36.76$  8.  $\text{€}52.19$   
 9.  $\text{€}49.14$  10.  $\text{€}96.46$  11.  $\text{€}95.82$  12.  $\text{€}78.76$   
 13.  $\text{€}2.39$  14.  $\text{€}1.79$  15.  $\text{€}1.38$  16.  $\text{€}1.38$   
 (page 66) 17.  $\text{€}4.11$  18.  $\text{€}8.54$  19.  $\text{€}7.15$  20.  $\text{€}4.24$

**Mental Problems**

1.  $\text{€}2.55$  2.  $\text{€}6.33$  3.  $\text{€}4.28$  4.  $\text{€}6.80$  5.  $\text{€}33$   
 6.  $\text{€}48$  7.  $\text{€}120$  8.  $10\%$  9.  $\text{€}36$  10.  $\text{€}583$   
 11.  $\text{€}320$  12.  $\text{€}160$

**Written Problems**

- (page 67) 1.  $\text{€}7.65$  2.  $\text{€}19.50$  3.  $\text{€}16.45$  4.  $36\text{c}$  5.  $\text{€}5.85$   
 6.  $\text{€}936$  7.  $\text{€}8.82$  8.  $\text{€}65.50$  9.  $\text{€}140$  10.  $\text{€}737$   
 11.  $\text{€}204$  12.  $\text{€}75.04$

**21. Length****Mental Computation**

- (page 68) 1.  $26\text{mm}$  2.  $48\text{mm}$  3.  $79\text{mm}$  4.  $123\text{mm}$  5.  $34\text{mm}$   
 6.  $57\text{mm}$  7.  $72\text{mm}$  8.  $136\text{mm}$  9.  $2.8\text{cm}$  10.  $6.7\text{cm}$   
 11.  $12.5\text{cm}$  12.  $14.2\text{cm}$  13.  $8.3\text{cm}$  14.  $9.7\text{cm}$  15.  $11.4\text{cm}$   
 16.  $16.8\text{cm}$  17.  $1.65\text{m}$  18.  $2.38\text{cm}$  19.  $3.08\text{m}$  20.  $9.34\text{m}$   
 21.  $4.26\text{m}$  22.  $6.92\text{m}$  23.  $8.09\text{m}$  24.  $12.07\text{m}$  25.  $2.365\text{km}$

26. 4.609km 27. 5.078km 28. 7.006km 29. 1.438km 30. 2.36km  
 31. 4.068km 32. 6.009km 33. 2190m 34. 4.765m 35. 3078m  
 36. 5007m 37. 4.500m 38. 3700m 39. 4.250m 40. 6750m  
 41. 3470m 42. 5800m 43. 4053m 44. 6090m

**Written Computation**

- (page 69) 1. 18cm 6mm 2. 13cm 5mm 3. 28m 56cm  
 4. 23m 67cm 5. 6m 90cm 6. 58.3cm  
 7. 15.9cm 8. 42.42m 9. 24.74m  
 10. 9.48m 11. 7.548km 12. 8.308km  
 13. 8.797km 14. 9.491km 15. 8.708km  
 16. 6.762km 17. 2.828km 18. 3.656km  
 19. 6.457km 20. 4.768km 21. 1.758km  
 22. 1.877km 23. 1.824km 24. 4.869km  
 25. 1.429km 26. 7.101km 27. 9.834km  
 28. 6.984km 29. 9.74km 30. 9.516km  
 31. 25.9cm 32. 20.28m 33. 12.339km  
 34. 12.982km 35. 5.6cm 36. 4.02m  
 (page 70) 37. 5.461km 38. 4.796km 39. 25.26m  
 40. 23.024km

**Mental Problems**

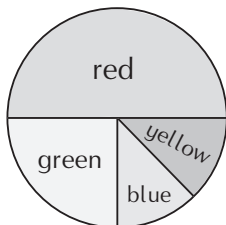
1. 9.4cm 2. 17cm 3. 1.48m 4. 8m  
 5. 5.285km 6. 350m 7. €3 8. 2.8km  
 9. 1.42m 10. 1.6km 11. 1.15m 12. 31.5km

**Written Problems**

- (page 71) 1. 50.3cm 2. 16.45m 3. 13.27m 4. 27.48m  
 5. 2.46m 6. 3.36m 7. 11.08m 8. 22.315km  
 9. 3.815km 10. 18.425km 11. 11.725km 12. 2.39m

**22. Data**

- (page 72) 1. 8, average = 8 2. 9 years 3. €10  
 4. 12mins 5. 13 6. 16  
 7. (a) 10 years (b) 2 (c) 2 (d) Tim  
 (page 73) 8. (a) reds (b) yellows (c) (i) 17 (ii) 12 (iii) 7 (iv) 6  
 (d) 7 (e) 10 (f) 26 (g) 14  
 9. Graphics  
 (page 74) 10. (a) (i) football (ii) tennis (b) (i) athletics (ii) athletics  
 (c) football (d) soccer (e) 56 (f) 56 (g) 28  
 (page 74) 11. (a) 12 (b) 6 (c) 3 (d)  $\frac{1}{8}$  (e) 50% (f) 0.25  
 12. (a) 12 (b) 6 (c)  $\frac{1}{4}$  (d) 25% (e) brown  
 13. (a) (b)  $\frac{1}{8}$  (c) 25%



**23. Weight****Mental Computation**

- (page 75)
- |                           |                         |                          |                          |
|---------------------------|-------------------------|--------------------------|--------------------------|
| 1. (a) 1300g              | (b) 2450g               | (c) 2185g                | (d) 3675g                |
| (e) 2500g                 | (f) 3250g               | (g) 4750g                | (h) 3700g                |
| 2. (a) 2480g              | (b) 3760g               | (c) 4900g                | (d) 2080g                |
| (e) 1375g                 | (f) 4590g               | (g) 6700g                | (h) 5065g                |
| 3. (a) 2.7kg              | (b) 1.98kg              | (c) 2.095kg              | (d) 4.006kg              |
| (e) 2.6kg                 | (f) 3.67kg              | (g) 4.945kg              | (h) 1.085kg              |
| 4. (a) 540g               | (b) 275g                | (c) 355g                 | (d) 435g                 |
| (e) 250g                  | (f) 115g                | (g) 935g                 | (h) 360g                 |
| 5. (a) 1kg 785g           | (b) 2kg 384g            | (c) 4kg 78g              | (d) 5kg 9g               |
| (e) 3kg 500g              | (f) 2kg 250g            | (g) 1kg 750g             | (h) 2kg 700g             |
| 6. (a) $2\frac{3}{10}$ kg | (b) $2\frac{3}{100}$ kg | (c) $2\frac{3}{1000}$ kg | (d) $2\frac{1}{4}$ kg    |
| (e) $3\frac{3}{5}$ kg     | (f) $6\frac{3}{4}$ kg   | (g) $4\frac{9}{100}$ kg  | (h) $3\frac{7}{1000}$ kg |

**Written Computation**

- (page 76)
- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| 1. 7.845kg  | 2. 8.005kg  | 3. 8.341kg  | 4. 8.345kg  |
| 5. 8.8kg    | 6. 5.359kg  | 7. 4.657kg  | 8. 4.687kg  |
| 9. 3.778kg  | 10. 4.318kg | 11. 5.205kg | 12. 8.982kg |
| 13. 9.752kg | 14. 8.288kg | 15. 8.463kg | 16. 0.795kg |
| 17. 2.642kg | 18. 2.343kg | 19. 1.429kg | 20. 0.971kg |
| 21. 8.665kg | 22. 8.19kg  | 23. 7.698kg | 24. 7.377kg |
| 25. 1.465kg | 26. 2.728kg | 27. 6.63kg  | 28. 9.568kg |
| 29. 2.764kg | 30. 1.055kg |             |             |

**Mental Problems**

- (page 77)
- |          |            |        |          |
|----------|------------|--------|----------|
| 1. 2250g | 2. 325g    | 3. 8   | 4. €5    |
| 5. €4    | 6. €2      | 7. 7   | 8. €1.20 |
| 9. 9     | 10. €12.80 | 11. €2 | 12. 20c  |

**Written Problems**

- (page 78)
- |            |             |            |            |
|------------|-------------|------------|------------|
| 1. 83.36kg | 2. 2.61kg   | 3. 9.555kg | 4. 3.457kg |
| 5. 1.925kg | 6. 67.795kg | 7. €7.68   | 8. €8.96   |
| 9. €3.70   | 10. €26.64  | 11. €2.90  | 12. €12.72 |

**24. Algebra****A. Directed Numbers**

- (page 79)
- |                   |                |               |                |      |
|-------------------|----------------|---------------|----------------|------|
| 1. 10             | 2. 12          | 3. 17         | 4. 20          | 5. 7 |
| 6. (a) $16^\circ$ | (b) $14^\circ$ | (c) $9^\circ$ | (d) $12^\circ$ |      |
| (e) $25^\circ$    | (f) $8^\circ$  | (g) $5^\circ$ | (h) $12^\circ$ |      |
| 7. (a) 15         | (b) 15         | (c) 18        | (d) 9          |      |
| (e) 40            | (f) 17         | (g) 21        | (h) 12         |      |

- (page 80)
- |            |       |               |         |
|------------|-------|---------------|---------|
| 8. 39 mins | 9. 65 | 10. 31 floors | 11. €54 |
|------------|-------|---------------|---------|

**B. Rules and Properties**

- |               |                |                 |               |
|---------------|----------------|-----------------|---------------|
| 1. 40, 48, 56 | 2. 35, 30, 25  | 3. 28, 34, 40   | 4. 56, 49, 42 |
| 5. 25, 36, 49 | 6. 32, 64, 128 | 7. 7.5, 9, 10.5 | 8. 15, 21, 28 |
| 9. 31, 46, 64 | 10. 21, 31, 43 |                 |               |
| 11. 17        | 12. 1          | 13. 16          | 14. 6         |
| 15. 21        |                |                 |               |
| 16. 13        | 17. 18         | 18. 30          | 19. 11        |
| 20. 6         |                |                 |               |
| 21. 38        | 22. 14         | 23. 24          | 24. 72        |
|               |                |                 | 25. 34        |

- (page 81) 26. 54      27. 54      28. 40      29. true      30. true  
 31. (a) 62 (b) 61 (c) 3      32. (a) 13 (b) 15 (c) 65  
 33. (a) 5 (b) 11 (c) 59      34. (a) 51 (b) 5 (c) 5  
 35. (a) 97 (b) 70 (c) 33      36. (a) 1054 (b) 1740 (c) 778  
 37. (a) 95 (b) 142 (c) 288      38. (a) 66 (b) 166 (c) 288  
 39. (a) 166.7 (b) 7.13 (c) 4.87      40. (a) 21 (b) 289 (c) 178

### C. Equations

- (page 81) 1. (a) 7 (b) 48 (c) 8      2. (a) 9 (b) 5 (c) 7      3. (a) 9 (b) 7 (c) 8  
 4. (a) 42 (b) 6 (c) 24      5. (a) 10 (b) 45 (c) 20      6. (a) + (b) × (c) –  
 7. (a) ÷ (b) × (c) –      8. (a) ÷ (b) + (c) ÷
- (page 82) 9.  $35 + 25 = 60$       10.  $68 + 4 = 9 \times 8$   
 11.  $7 \times 5 = 30 + 5$       12.  $60 - 4 = 8 \times 7$   
 13.  $25 + 12 = \boxed{37}$       14.  $42 - 8 = \boxed{34}$       15.  $12 \times 5 = \boxed{60}$   
 16.  $56 \div 7 = \boxed{8}$       17. (a) 8 (b) 18 (c) 12      18. (a) 14 (b) 36 (c) 24  
 19. (a) 35 (b) 42 (c) 27      20. (a) 30 (b) 28 (c) 48      21. (a) 18 (b) 35 (c) 81  
 22. (a) 9 (b) 7 (c) 27      23. (a) 8 (b) 20 (c) 7      24. (a) 18 (b) 24 (c) 15
25. (a)  $\boxed{\times} \boxed{-}$  (b)  $\boxed{\times} \boxed{+}$       26. (a)  $\boxed{-} \boxed{\times}$  (b)  $\boxed{+} \boxed{\times}$   
 27. (a)  $\boxed{+} \boxed{-}$  (b)  $\boxed{-} \boxed{\times}$       28. (a)  $\boxed{\div} \boxed{\times}$  (b)  $\boxed{-} \boxed{\times}$

## 25. Capacity

### Mental Computation

- (page 83) 1. 1275ml      2. 2065ml      3. 2250ml      4. 2009ml  
 5. 3570ml      6. 3750ml      7. 4200ml      8. 5085ml  
 9. 1.73l      10. 2.075l      11. 2.096l      12. 3.008l  
 13. 2.3l      14. 3.07l      15. 1.009l      16. 2.183l  
 17. 330ml      18. 415ml      19. 150ml      20. 925ml

### Written Computation

1. 9.274l      2. 7.612l      3. 3.126l      4. 4.877l  
 5. 2.616l      6. 5.025l      7. 8.628l      8. 9.388l  
 9. 8.6l      10. 9.156l      11. 0.973l      12. 1.599l  
 13. 2.428l      14. 1.243l
- (page 84) 15. 1.099l      16. 7.942l      17. 7.255l      18. 0.741l  
 19. 8.544l      20. 1.147l

### Mental Problems

1. 3250ml      2. 235ml      3. 8      4. €2.40  
 5. €1      6. 9      7. €4.80      8. €19  
 9. €9      10. €450      11. 80c      12. 50c

### Written Problems

- (page 85) 1. 12.25l      2. 3.425l      3. 7.425l      4. 4.12l  
 5. 2.344l      6. €5.34      7. €5.46      8. €9.59  
 9. €1.65      10. €1.45      11. €1.76      12. €2.66

## 26. Chance

- (page 86) 1. (a) 50, 50      (b) no      (c) true      (d) two  
 2. (a) graphic      (b) no      (c) no

- (d) (i) 1 in 4 (ii) 1 in 4 (iii) even  
 (e) I can get a **head and tail** or a **tail and head**.
- (page 87) 3. (a) 6 (b) 1 in 6 (c) true (d) 1 in 2 (e) true  
 4. (a) graphic (b) graphic (c) graphic (d) unlikely (d) even chance  
 (f) 3 in 10 (g) 1 in 5
5. (i) (a) 2 in 5 (b) 3 in 10 (c) 1 in 5 (d) 1 in 10  
 (ii) (a) 20 (b) 15 (c) 10 (d) 5
- (page 88) 6. (a) 1 in 4 (b) 3 in 8 (c) 1 in 8 (d) 1 in 4  
 (e) Cork (f) Clare (g) no
7. (a) 100 (b) apple (c) pear (d) 2 in 5  
 (e) 1 in 4 (f) 1 in 5 (g) 3 in 20
8. (a) 2 in 5 (b) 1 in 4 (c) 1 in 5 (d) 3 in 20

## 27. Test Yourself 2

### Mental Computation

- (page 89) 1. 71 2. 102 3. 119 4. 6R4 5. 9R7  
 6. 8R5 7.  $\frac{9}{12}$  8.  $\frac{8}{12}$  9.  $\frac{10}{12}$  10.  $\frac{8}{10}$   
 11.  $4\frac{2}{3}$  12.  $4\frac{5}{6}$  13.  $3\frac{7}{8}$  14.  $5\frac{8}{9}$  15. 0.7  
 16. 0.09 17. 0.003 18. 0.017 19. 0.5 20. 0.25  
 21. 0.75 22. 0.6 23.  $\frac{1}{2}$  24.  $\frac{3}{4}$  25.  $\frac{2}{5}$   
 26.  $\frac{1}{20}$  27. 9 28. 6 29. 21 30. 12

### Written Computation

1.  $4\frac{5}{12}$  2.  $5\frac{1}{6}$  3.  $4\frac{5}{9}$  4.  $6\frac{1}{2}$  5.  $2\frac{2}{3}$   
 6.  $1\frac{5}{8}$  7.  $4\frac{1}{5}$  8.  $3\frac{8}{9}$  9. 19.722 10. 43.976  
 11. 69.201 12. 59.332 13. 25R18 14. 22R38 15. 22R38  
 16. 23R30 17. 480 18. 594 19. 741 20. 417

### Mental Problems

- (page 90) 1. 63 2. €3.65 3. 80 4. €9.60  
 5. 80 6. 24 7. 57980 8. 25%  
 9. 25% 10. 4 11. €66 12. €63

### Written Problems

- (page 91) 1. €77.85 2. €12.56 3. €5.79 4. €31.12  
 5. 10612 6. 19 7. 34 8.  $4\frac{2}{3}$   
 9.  $2\frac{5}{8}$  10. 290 11. 1182 12. €432

## 28. Test Yourself 3

### Mental Computation

- (page 92) 1. 1hr 18mins 2. 1hr 51mins 3. 2hrs 27mins 4. 2hrs 49mins  
 5. 04:25 6. 13:45 7. 19:38 8. 21:54  
 9. 2.075km 10. 3.008km 11. 5.76km 12. 4.019km  
 13. 21 14. 56 15. 14 16. 6  
 17. 23 18. 21 19. 9 20. 21  
 21. 3 22. 12 23. 14 24. 12  
 25. 375g 26. 2060g 27. 1750g 28. 515ml  
 29. 1700ml 30. 1600ml

**Written Computation**

- |                  |           |           |           |           |
|------------------|-----------|-----------|-----------|-----------|
| 1. €59.28        | 2. €71.92 | 3. €93.35 | 4. €95.06 | 5. €95.34 |
| 6. €6.58         | 7. €5.73  | 8. €8.93  | 9. €7.73  | 10. €7.42 |
| 11. 26R7         | 12. 27R8  | 13. 21R12 | 14. 21R29 | 15. 40R9  |
| (page 93) 16. 21 | 17. 545   | 18. 377   | 19. 516   | 20. 639   |

**Mental Problems**

- |                      |         |        |          |                     |
|----------------------|---------|--------|----------|---------------------|
| 1. €3.35             | 2. 120  | 3. 35% | 4. 17:05 | 5. 15m <sup>2</sup> |
| 6. 96cm <sup>2</sup> | 7. €32  | 8. 13  | 9. €2.50 | 10. €120            |
| 11. 40c              | 12. 40c |        |          |                     |

**Written Problems**

- |                    |                      |          |             |          |
|--------------------|----------------------|----------|-------------|----------|
| (page 94) 1. 17:12 | 2. 486m <sup>2</sup> | 3. €930  | 4. 18.235km | 5. €2.80 |
| 6. €6.25           | 7. 2.434l            | 8. €1.40 | 9. €46      | 10. €108 |
| 11. €228           | 12. €7.76            |          |             |          |