

Answers Busy at Maths 3

PAGE 1

- (a) 136
(b) 168
(c) 54
(d) 148
(e) 105

3.

- (a) 25, 26, 27, 29, 30, 32, 33, 34
(b) 95, 97, 99, 100, 101, 102, 103, 104
(c) 114, 116, 117, 118, 120, 121, 122, 124
(d) 166, 167, 169, 170, 171, 173, 174, 175

4.

- (a) 18, 22, 24, 26, 30, 32, 34
(b) 28, 36, 44, 48, 52, 56, 60,
(c) 12, 21, 24, 30, 33, 36, 39
(d) 12, 30, 36, 42, 54, 60, 66, 72

PAGE 2

1.

- (a) $7 > 5$
(b) $9 < 12$
(c) $12 < 17$
(d) $18 > 16$
(e) $28 < 37$
(f) $69 < 96$
(g) $84 > 48$
(h) $74 > 47$
(i) $97 > 79$
(j) $64 < 78$
(k) $79 < 97$
(l) $83 > 38$

2.

- (a) $8 + 4 < 6 + 9$
(b) $7 + 6 = 15 - 2$
(c) $18 - 6 < 9 + 8$
(d) $7 + 9 = 10 + 6$
(e) $19 - 3 > 12 + 3$
(f) $13 + 5 = 9 + 9$
(g) $17 - 6 = 18 - 9$
(h) $28 - 7 = 17 + 4$
(i) $19 + 10 > 13 + 13$

3.

- (a) 69, 72, 96
(b) 81, 108, 180
(c) 178, 187, 190

4.

- (a) 91, 87, 78
(b) 153, 135, 126
(c) 191, 171, 119

5.

- (a) fifty-six
(b) 94
(c) 67
(d) eighty-five
(e) ninety-eight
(f) 73
(g) 118
(h) one hundred and six
(i) one hundred and sixty
(j) 175
(k) 109
(l) one hundred and eighty

PAGE 3

1.

- (a) square
(b) rectangle
(c) triangle
(d) oval
(e) semi-circle

2.

- (a) cone
(b) cube
(c) cuboid
(d) cylinder
(e) sphere

3.

- (a) ✓
(b) ✗
(c) ✓
(d) ✓

4.

- (a) 5
(b) 3
(c) 6
(d) 10

5.

- (a) 2
(b) 4
(c) 3
(d) 1

6.

- (a) $\frac{1}{2}$
(b) $\frac{1}{4}$
(c) $\frac{2}{4}$ or $\frac{1}{2}$
(d) $\frac{1}{4}$

PAGE 4

1.

- (a) 82
(b) 70
(c) 67
(d) 90

2.

- (a) 50c, 20c, 5c, 2c, 1c
(b) 50c, 20c, 20c, 5c
(c) 50c, 5c, 2c, 2c

3.

- 20c – €0.20
52c – €0.52
23c – €0.23
22c – €0.22
131c – €1.31
132c – €1.32

4.

- (a) $\frac{1}{2}$ past 8
(b) $\frac{1}{4}$ past 6
(c) $\frac{1}{4}$ to 6
(d) $\frac{1}{4}$ past 9

PAGE 5

1.

- (a) 16
(b) 17
(c) 17
(d) 23
(e) 18
(f) 17
(g) 16
(h) 19
(i) 19

2.

- (a) 59
(b) 62
(c) 55
(d) 79
(e) 57
(f) 73

3.

- (a) 33
(b) 53
(c) 43
(d) 65
(e) 24
(f) 35

4. $42 + 26 = 68$

5. $38 - 7 = 31$

6. $25 - 12 = 13$

7. $23 - 6 = 17$

8. $36 + 15 = 51$

PAGE 6

1. 20

2. 80

3. 7:30

4. €1.62

5. 12c

6. 24

7. 25

8. 30

9. 25c

10. 15, 35

11. 10

12. 4

13. 7

14. third container

15. =

16. 108

17. 68

18. Thursday

19. 30c

20. 25

PAGE 7

1.

- (a) 361
(b) 454
(c) 560
(d) 406
(e) 333

2.

- (a) 413
(b) 252
(c) 360
(d) 509
(e) 660

PAGE 8

1. $300 + 40 + 7 = 347$
2. $400 + 20 + 3 = 423$
3. $600 + 20 + 8 = 628$
4. $500 + 0 + 8 = 508$
5. $700 + 40 + 6 = 746$
6. $900 + 60 + 0 = 960$
7. $600 + 20 + 0 = 620$
8. $700 + 70 + 9 = 779$

PAGE 9

1.
 - (a) $300 + 10 + 8 = 318$
 - (b) $200 + 50 + 9 = 259$

2.**Across:**

1. 600
2. 80
3. 999
4. 2
5. 685
7. 900
10. 846
13. 724

Down:

6. 899
8. 510
9. 998
11. 440
12. 356
14. 62

PAGE 10

1.
 - (b) 200
 - (c) 90
 - (d) 1
 - (e) 40
 - (f) 5
 - (g) 70
 - (h) 900
 - (i) 60
 - (j) 50
 - (k) 50
 - (l) 0
 - (m) 60
 - (n) 700
 - (o) 7
 - (p) 800

2.

- (a) 7
- (b) 2
- (c) 7
- (d) 4
- (e) 7
- (f) 6

4.

- (a) 357
- (b) $921 - 129$
- (c) $874 - 478$
- (d) $852 - 258$

5.

- (a) 345
- (b) 543
- (c) 453
- (d) 354
- (e) 534
- (f) 435
- (i) 543
- (ii) 345
- (iii) 534

PAGE 11

1. 318, 319, 321, 322, 323, 324, 325, 326
2. Cusack Park: 97, 99, 100, 101, 103
Wexford Park: 109, 110, 111, 113, 114, 116, 117
Walsh Park: 199, 200, 202, 203, 204, 206
Nowlan Park: 395, 397, 398, 400, 401, 402, 403
McHale Park: 692, 693, 695, 696, 698, 699, 700

3.

- (a) 7, 17, 71
- (b) 516, 615, 651
- (c) 508, 805, 855

4.

- (a) 802, 280, 208
- (b) 593, 395, 359
- (c) 756, 675, 576

5.

- (b) seventy-six
- (c) one hundred and eighty-five
- (d) two hundred and seven
- (e) four hundred and seventy-six

- (f) five hundred and seventeen
- (g) eight hundred and twenty-four
- (h) nine hundred and eight

PAGE 12**1.**

- (a) Róisín
 - (b) Amy
2.
 - (a) Cork
 - (b) Dublin
 - (c) 988, 798, 777

3.

- (a) May
- (b) August
- (c) 943, 934, 493, 349

4.

- (a) 165, 561, 651, 655
- (b) Kind Kings
- (c) Jimmy Joes
- (d) (i) 500
(ii) 5
(iii) 50

PAGE 13**1.**

- (a) 7
- (b) 20
- (c) 33
- (d) 47
- (e) 80
- (f) 63
- (g) 111
- (h) 201

2.

- (a) |||||
- (b) ∩ ||||
- (c) ∩ ∩
- (d) ∩ ∩ ∩ |||
- (e) ∩ ∩ ∩ ∩ |
- (f) ⊖ |
- (g) ⊖ ∩ ∩ |||
- (h) ⊖ ⊖ ∩ ∩ ||
- (i) ⊖ ⊖ ⊖ ⊖ ∩

3.

- (b) $100c + 10c + 100c + 100c + 10c + 100c = 420c = €4.20$
- (c) $100c + 10c + 100c + 100c + 10c + 100c = 420c = €4.20$
- (d) $100c + 100c + 10c + 100c + 100c = 410c = €4.10$

4.

- (a) 240, 370, 510, 787
- (b) 90, 260, 300, 534, 858
- (c) 146, 300, 550, 603, 842
- (d) 0, 195, 209, 330, 773

PAGE 14**1.**

- (a) VENUS
- (b) NEPTUNE
- (c) JUPITER
- (d) MARS
- (e) SATURN
- (f) URANUS

2.

- (a) 999
- (b) 101
- (c) 666
- (d) 602
- (e) 219, 435, 534, 999
- (f) 810, 602, 435, 408
- (g) 311, 120, 418, 922
- (h) 670, 630, 612, 216
- (i) 100, 209, 610, 656
- (j) 398, 425, 592, 800
- (k) 201, 766, 910, 433
- (l) 666
- (m) 333

PAGE 15**1.**

- (b) 4, 15, 17 = 26
- (c) 8, 15, 18, 19, 5 = 65
- (d) 20, 9, 7, 5, 18 = 59
- (e) 11, 15, 1, 12, 1 = 40
- (f) 7, 15, 1, 20 = 43
- (g) 4, 5, 5, 18 = 32
- (h) 6, 18, 15, 7 = 46
- (i) horse
- (j) dog
- (k) deer, koala, goat, frog, rabbit, tiger, horse

2.
(a) 540
(b) 849
(c) 630
(d) 906
(e) 369
(f) 848

Challenge: (a) otter = 78
 (others can be found)
 (b) lion

PAGE 16

1.
(a) 20
(b) 40
(c) 90
(d) 100
(e) 670
(f) 740
(g) 810
(h) 860
2.
(a) 100
(b) 200
(c) 100
(d) 200
(e) 300
(f) 800
(g) 900
(h) 900

3.
(a) 27
(b) 84
(c) 94
(d) 315
(e) 608
(f) 453

Challenge 1: 777
Challenge 2: 333

PAGE 18

- A.** 58, 89, 88, 79, 90 = angel
B. 68, 58, 99, 79 = face
C. 51, 74, 89, 79, 93 = honey
D. 70, 94, 96, 70, 75, 33, 89 = pumpkin
E. 70, 33, 79 = pie

- F.** 49, 74, 74, 49, 90, 79 = doodle
G. 83, 94, 88 = bug
H. 96, 74, 78, 51, 79, 87 = mother

PAGE 19

1.
(a) 2 hundreds + 9 tens + 4 units = 294
(b) 3 hundreds + 5 tens + 8 units = 358
(c) 6 hundreds + 8 tens + 2 units = 682
(d) 8 hundreds + 1 ten + 5 units = 815
(e) 7 hundreds + 7 tens + 3 units = 773
(f) 9 hundreds + 4 tens + 9 units = 949

2.
(a) 2 hundreds + 4 tens + 6 units = 246
(b) 4 hundreds + 5 tens + 1 unit = 451
(c) 5 hundreds + 1 ten + 3 units = 513
(d) 7 hundreds + 7 tens + 9 units = 779
(e) 9 hundreds + 6 tens + 2 units = 962
(f) 8 hundreds + 9 tens + 8 units = 898

Challenge: 3 hundreds + 5 tens + 3 units = 353

PAGE 20

1.
(a)
$$\begin{array}{r} 3 + 5 + 1 = 9 \\ 20 + 40 + 20 = 80 \\ 100 + 200 + 300 = 600 \\ \hline 689 \end{array}$$

(b)
$$\begin{array}{r} 4 + 1 + 2 = 7 \\ 0 + 20 + 50 = 70 \\ 200 + 400 + 200 = 800 \\ \hline 877 \end{array}$$

(c)
$$\begin{array}{r} 3 + 2 + 4 = 9 \\ 20 + 40 + 10 = 70 \\ 500 + 100 + 300 = 900 \\ \hline 979 \end{array}$$

- (d)**
$$\begin{array}{r} 2 + 3 + 1 = 6 \\ 30 + 10 + 50 = 90 \\ 400 + 200 + 300 = 900 \\ \hline 996 \end{array}$$

2.
(a) 889
(b) 759
(c) 906
(d) 697

3. $132 + 144 + 123 = 399$

Challenge: $342 + 425 + 121 = 888$

PAGE 21

1.
(a)
$$\begin{array}{r} €324 \\ +€202 \\ \hline €526 \end{array}$$

(b)
$$\begin{array}{r} €324 \\ +€164 \\ \hline €488 \end{array}$$

(c)
$$\begin{array}{r} €331 \\ +€114 \\ \hline €445 \end{array}$$

(d)
$$\begin{array}{r} €445 \\ +€112 \\ \hline €557 \end{array}$$

(e)
$$\begin{array}{r} €110 \\ €114 \\ +€202 \\ \hline €426 \end{array}$$

(f)
$$\begin{array}{r} €324 \\ €110 \\ +€331 \\ \hline €765 \end{array}$$

(g)
$$\begin{array}{r} €455 \\ €202 \\ +€112 \\ \hline €769 \end{array}$$

(h)
$$\begin{array}{r} €110 \\ €164 \\ +€112 \\ \hline €386 \end{array}$$

Challenge 1:
$$\begin{array}{r} €114 \\ €112 \\ \hline €226 \end{array}$$

Challenge 2:
$$\begin{array}{r} €455 \\ €331 \\ \hline €786 \end{array}$$

PAGE 22

1.
(a)
$$\begin{array}{r} €329 \\ +€345 \\ \hline €674 \end{array}$$

(b)
$$\begin{array}{r} €139 \\ +€248 \\ \hline €387 \end{array}$$

(c)
$$\begin{array}{r} €126 \\ +€507 \\ \hline €633 \end{array}$$

(d)
$$\begin{array}{r} €438 \\ +€139 \\ \hline €577 \end{array}$$

(e)
$$\begin{array}{r} €126 \\ +€438 \\ \hline €564 \end{array}$$

(f)
$$\begin{array}{r} €507 \\ +€248 \\ \hline €755 \end{array}$$

(g)
$$\begin{array}{r} €345 \\ +€139 \\ \hline €484 \end{array}$$

(h)
$$\begin{array}{r} €329 \\ +€248 \\ \hline €577 \end{array}$$

Challenge 1:
$$\begin{array}{r} €126 \\ €139 \\ \hline €265 \end{array}$$

Challenge 2:
$$\begin{array}{r} €438 \\ €507 \\ \hline €945 \end{array}$$

PAGE 23

1.
(a)
$$\begin{array}{r} €370 \\ +€241 \\ \hline €611 \end{array}$$

(b)
$$\begin{array}{r} €182 \\ +€164 \\ \hline €346 \end{array}$$

$$\begin{array}{r} \text{(c)} \quad \text{€}135 \\ +\text{€}182 \\ \hline \text{€}317 \end{array}$$

$$\begin{array}{r} \text{(d)} \quad \text{€}223 \\ +\text{€}182 \\ \hline \text{€}405 \end{array}$$

$$\begin{array}{r} \text{(e)} \quad \text{€}182 \\ \text{€}135 \\ +\text{€}370 \\ \hline \text{€}687 \end{array}$$

$$\begin{array}{r} \text{(f)} \quad \text{€}223 \\ \text{€}164 \\ +\text{€}241 \\ \hline \text{€}628 \end{array}$$

$$\begin{array}{r} \text{(g)} \quad \text{€}135 \\ \text{€}54 \\ +\text{€}370 \\ \hline \text{€}559 \end{array}$$

$$\begin{array}{r} \text{(h)} \quad \text{€}54 \\ \text{€}182 \\ +\text{€}223 \\ \hline \text{€}459 \end{array}$$

- 2.
- (a) 799
 - (b) 766
 - (c) 898
 - (d) 872
 - (e) 664
 - (f) 849

PAGE 24

1.

$$\begin{array}{r} \text{(a)} \quad \text{€}269 \\ +\text{€}176 \\ \hline \text{€}445 \end{array}$$

$$\begin{array}{r} \text{(b)} \quad \text{€}359 \\ +\text{€}455 \\ \hline \text{€}814 \end{array}$$

$$\begin{array}{r} \text{(c)} \quad \text{€}268 \\ +\text{€}386 \\ \hline \text{€}654 \end{array}$$

$$\begin{array}{r} \text{(d)} \quad \text{€}177 \\ +\text{€}455 \\ \hline \text{€}632 \end{array}$$

$$\begin{array}{r} \text{(e)} \quad \text{€}177 \\ \text{€}455 \\ +\text{€}269 \\ \hline \text{€}901 \end{array}$$

$$\begin{array}{r} \text{(f)} \quad \text{€}455 \\ \text{€}268 \\ +\text{€}177 \\ \hline \text{€}900 \end{array}$$

$$\begin{array}{r} \text{(g)} \quad \text{€}177 \\ \text{€}176 \\ +\text{€}268 \\ \hline \text{€}621 \end{array}$$

$$\begin{array}{r} \text{(h)} \quad \text{€}269 \\ \text{€}176 \\ +\text{€}359 \\ \hline \text{€}804 \end{array}$$

- 2.
- (a) 773
 - (b) 979
 - (c) 966
 - (d) 465
 - (e) 782
 - (f) 945

PAGE 25

- 1. 120
- 2. $30 + 5 = 235$
- 3. 509
- 4. 6 hundred
- 5. 467
- 6. 7
- 7. 493
- 8. 858
- 9. 965
- 10. 708
- 11. 166
- 12. 200
- 13. middle digit
- 14. 549
- 15. 670
- 16. 500
- 17. 467
- 18. 569
- 19. 759
- 20. 386

PAGE 26

- (a) regular
- (b) regular
- (c) irregular
- (d) regular
- (e) regular
- (f) irregular
- (g) regular
- (h) irregular

- 2.
- (a) 6
 - (b) 6
 - (c) greater
 - (d) 3
- 3.
- (a) honeycomb
 - (b) pencil
 - (c) screw
 - (d) tiles
 - (e) clock
 - (f) toy building block

PAGE 27

- 1.
- (a) ✓
 - (b) X
 - (c) ✓
- 3.
- (a) 3
 - (b) 4; 2 and 5; 6 and 3
 - (c) 6
- Challenge: (a) triangle
(b) regular

PAGE 28

- 2.
- (a) 3, 3, 0, X
 - (b) 4, 4, 4, ✓
 - (c) 4, 4, 4, ✓
 - (d) 4, 4, 0, X
 - (e) 6, 6, 0, ✓
- Challenge: Its sides are not even.

PAGE 29

- 1.
- (d) ✓
 - (e) X
 - (f) ✓
 - (g) X
 - (h) ✓
 - (i) ✓
 - (j) X
 - (k) ✓
2. ✓
- 3.

- (a) square
- (b) hexagon
- (c) semi-circle
- (d) rectangle

4. Clock, -----, igloo

Challenge: Both lines of an angle must be straight.

PAGE 30

- 1.
- (a) ✓
 - (b) X
 - (c) ✓
 - (d) ✓
 - (e) X
 - (f) ✓
 - (g) ✓
 - (h) X

PAGE 31

- 1.
- (a) 19 units
 - (b) 6 tens + 14 units
 - (c) 7 tens + 15 units
- 2.
- (a) 8 units
 - (b) 4 hundreds + 17 tens + 2 units
 - (c) 6 hundreds + 18 tens + 3 units
- 3.
- (b) 3, 4, 22
 - (c) 4, 5, 27
 - (d) 5, 7, 26
 - (e) 8, 6, 28

- 4.
- (b) 3, 14, 6
 - (c) 4, 11, 8
 - (d) 6, 18, 7
 - (e) 7, 19, 5

PAGE 32

- 1.
- (a) 43
 - (b) 23
 - (c) 13
 - (d) 39

- (e) 23
- (f) 17
- (g) 124
- (h) 118
- (i) 127

- 2.
- (a) 19
 - (b) 33
 - (c) 29
 - (d) 63
 - (e) 131
 - (f) 206
 - (g) 44
 - (h) 78
 - (i) 67

3. 29

4. 52

Challenge: 72

PAGE 33

- 1.
- (a) 411
 - (b) 322
 - (c) 131
 - (d) 353
 - (e) 933
 - (f) 232

- 2.
- (a) 225
 - (b) 328
 - (c) 406
 - (d) 447
 - (e) 349
 - (f) 348

Challenge: 233

PAGE 34

- 1.
- (a) 243
 - (b) 341
 - (c) 393
 - (d) 175
 - (e) 174
 - (f) 93

- 2.
- (a) 323
 - (b) 164
 - (c) 422
 - (d) 262
 - (e) 431
 - (f) 365

- 3.
- (a) 211
 - (b) 183
 - (c) 383
 - (d) 503
 - (e) 630
 - (f) 816

4. 74

5. 392

6. 192

Challenge: 172

PAGE 35

- 1.
- (a) 264
 - (b) 277
 - (c) 327
 - (d) 374
 - (e) 448
 - (f) 258

- 2.
- (a) 632
 - (b) 647
 - (c) 823
 - (d) 811

PAGE 36

- A. elephant
- B. snail
- C. shark
- D. butterfly
- E. starfish
- F. goldfish
- G. crocodile

- A. elephant
- B. snail
- C. shark
- D. snail

- E. Starfish
- F. Goldfish
- G. crocodile

PAGE 37

- 1.
- (a) Swimming
 - (b) 8
 - (c) 6
 - (d) 40
 - (e) $\frac{1}{2}$
 - (f) 47

- 2.
- (a) Thursday
 - (b) Friday
 - (c) 11
 - (d) 57
 - (e) 5

PAGE 38

- 1.
- (b) 25
 - (c) 9
 - (d) jellyfish

PAGE 39

- 1.
- (a) guitar
 - (b) violin and piano
 - (c) 20
 - (d) 124

PAGE 40

1. dogs – 10, cats – 12,
rabbits – 8, turtles – 16
- 3.
- (a) 48
 - (b) 5 hours
 - (c) 7

PAGE 41

- 1. 568
- 2. 400
- 3. hexagon
- 4. parallel
- 5. irregular
- 6. 649
- 7. 883
- 8. 450

- 9. 324
- 10. 430
- 11. circle
- 12. 210
- 13. 105
- 14. 863
- 15. 8, 5, 14
- 16. 6, 13, 8
- 17. 150
- 18. 35
- 19. 24
- 20. 500

PAGE 42

- 1.
- (a) 115
 - (b) 623
 - (c) 354
 - (d) 561
 - (e) 233
 - (f) 144

2. 401

Challenge: 152

PAGE 43

- 1.
- (a) 628
 - (b) 724
 - (c) 802
 - (d) 950

- 2.
- (a) 106
 - (b) 170
 - (c) 28
 - (d) 322

- 3.
- (a) 618, 554, 822, 778, 670
 - (b) 322

PAGE 44

- 1. 224
- 2. 226
- 3. 104
- 4. 67
- 5. 589
- 6. 160
- 7. 65
- 8. 901

9. 129

10. 189

Challenge: 267

PAGE 45

(a) $324 - 148 = 176$,
 $176 + 239 = 415$

(b) $512 - 275 = 237$,
 $237 - 186 = 51$

(c) $257 + 379 = 636$,
 $636 - 478 = 158$

2. $273 - 137 = 136$,
 $136 + 129 = 265$

3.

(a) $256 + 317 = 573 - 185 = 388$

(b) $524 - 279 = 245 + 387 = 632$

(c) $342 + 489 = 831 - 295 = 536$

Challenge 1: $473 - 87 = 386 + 105 = 491$

Challenge 2: $426 + 289 = 715 + 143 = 858$

PAGE 46

1. Friday

2. Monday

3. 271

4. 995

5. 202

6. 407

7. 189

8. 391

9. 434

10. 405

Challenge 1: 311

Challenge 2: 23

PAGE 47

(a) $4, 2 \times 2 = 4$

(b) $6, 3 \times 2 = 6$

(c) $8, 4 \times 2 = 8$

(d) $10, 5 \times 2 = 10$

(e) $12, 6 \times 2 = 12$

(f) $14, 7 \times 2 = 14$

2.

(a) $14, 7 \times 2 = 14$

(b) $2 + 2 + 2 + 2 + 2 = 10$,
 $5 \times 2 = 10$

Maths Fact: 16

PAGE 48

1.

(a) 2, 4, 6, 8, 10, 12, 14, 16,
18, 20

(d) 2, 4, 6, 8, 10, 12, 14, 16,
18, 20

(e) 8

(f) 6

(g) 10

(h) 14

(i) 16

(j) 20

2.

(b) 6, 8, 10, 12, 14, 16, 18, 20,
22, 24, 26, 28, 30

3.

(a) 4

(b) 12

(c) 20

(d) 24

(e) 16

(f) 22

(g) 10

(h) 14

(i) 28

(j) 18

(k) 6

(l) 30

4.

(a) $4 \times 2 = 8$

(b) $7 \times 2 = 14$

Maths Fact: 12

PAGE 49

1. 2, 18, 14, 4, 16, 10, 6, 20,
8, 12

2.

(a) 8

(b) 10

(c) 18

(d) 16

(e) 14

(f) 20

(g) 6

(h) 12

3.

(a) $3 \times 2 = 6$

(b) $8 \times 2 = 16$

(c) $6 \times 2 = 12$

(d) $2 \times 2 = 4$

(e) $10 \times 2 = 20$

(f) $9 \times 2 = 18$

4.

(a) 8

(b) 12

(c) 6

(d) 18

(e) 14

(f) 16

(g) 20

(h) 10

(i) 4

5.

(a) 12

(b) 16

(c) 8

(d) 14

(e) 4

(f) 18

(g) 2

(h) 20

(i) 10

Maths Fact: 14

PAGE 50

1.

(a) 8

(b) 12

(c) 24

2.

(a) $12, 3 \times 4 = 12$

(b) $16, 4 \times 4 = 16$

(c) $20, 4 \times 5 = 20$

(d) $24, 4 \times 6 = 24$

(e) $28, 4 \times 7 = 28$

3.

(a) 4, 8, 12, 16, 20, 24, 28, 32

(b) 12

(c) 7

4.

(a) $4 + 4 + 4 = 12, 3 \times 4 = 12$

(b) $4 + 4 + 4 + 4 + 4 = 20$,
 $5 \times 4 = 20$

(c) $4 + 4 + 4 + 4 + 4 + 4 + 4 = 28$,
 $7 \times 4 = 28$

(d) $4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = 36$,
 $9 \times 4 = 36$

PAGE 51

1.

(a) 4, 8, 12, 16, 20, 24, 28, 32,
36, 40

(b) 8, 12, 16, 20, 24, 28, 32,
36, 40

2.

(a) 4, 8, 12

(b) 20, 24, 28

(c) 16, 20, 24, 28, 32

(d) 12, 16, 20

(e) 8, 12, 16

(f) 20, 24, 28, 32, 36

(g) 32, 36, 40

(h) 28, 32, 36

(i) 0, 4, 8, 12, 16

3.

(a) 8

(b) 20

(c) 28

(d) 12

(e) 36

(f) 24

(g) 32

(h) 40

4.

(a) 16

(b) 32

(c) 20

(d) 40

(e) 28

(f) 36

5.
 (a) 8
 (b) 24
 (c) 36
 (d) 16
 (e) 32
 (f) 20
 (g) 40
 (h) 28
 (i) 12

Maths Fact: 24

PAGE 52

1.
 (a) 8
 (b) 20
 (c) 32
 (d) 12
 (e) 36
 (f) 28
 (g) 44
 (h) 40
 (i) 48

2.
 (a) 16
 (b) 24
 (c) 36
 (d) 28
 (e) 32
 (f) 40
 (g) 12
 (h) 20

3. 8, 12, 24, 4, 20, 16, 36, 32, 40, 28

4.
 (a) 28
 (b) 36
 (c) 24
 (d) 4
 (e) 32
 (f) 4
 (g) 11
 (h) 3
 (i) 10

5. 24, 4, 48, 8, 44, 28, 12, 40, 32

Maths Fact: 48
 Challenge: 36

PAGE 53

1.
 (a) $8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = 64$
 (b) 24
 (c) 40

2.
 (a) $32, 4 \times 8 = 32$
 (b) $24, 3 \times 8 = 24$
 (c) $48, 6 \times 8 = 48$

3.
 (a) $8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = 72$
 (b) 8
 (c) $3 \times 8 = 24$
 (d) $5 \times 8 = 40$

4.
 (a) $5 \times 8 = 40$
 (b) $4 \times 8 = 32$
 (c) $3 \times 8 = 24$
 (d) $9 \times 8 = 72$
 (e) $7 \times 8 = 56$
 (f) $6 \times 8 = 48$
 (g) $8 \times 8 = 64$
 (h) $10 \times 8 = 80$

Maths Fact: 56

PAGE 54

1.
 (a) 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
 (b) 32, 40
 (c) 16, 24, 32, 40, 48, 56, 64, 72, 80

2.
 (a) 16
 (b) 32
 (c) 24, 40
 (d) 48
 (e) 40
 (f) 64, 80, 88
 (g) 56
 (h) 72
 (i) 8, 24, 32

3.
 (a) 32
 (b) 16
 (c) 24
 (d) 48
 (e) 56
 (f) 72
 (g) 64
 (h) 80

4.
 (a) 32
 (b) 56
 (c) 48
 (d) 72
 (e) 64
 (f) 80

5.
 (a) 40
 (b) 24
 (c) 72
 (d) 16
 (e) 32
 (f) 56
 (g) 80
 (h) 64

Maths Fact: 64

PAGE 55

1.
 (a) 32
 (b) 16
 (c) 56
 (d) 40
 (e) 80
 (f) 64
 (g) 88
 (h) 48

2. 24, 40, 8, 80, 32, 16, 56, 72, 48, 64

3.
 (a) 24
 (b) 40
 (c) 64
 (d) 8
 (e) 8
 (f) 8
 (g) 6

- (h) 80
 (i) 7

4.
 (b) 2
 (c) 3
 (d) 1
 (e) 9
 (f) 8
 (g) 7
 (h) 10

5.
 (a) 56
 (b) 40
 (c) 24
 (d) 64
 (e) 80
 (f) 88
 (g) 72
 (h) 96
 (i) 48

Maths Fact: 72

PAGE 56

1.
 (a) 10
 (b) 5
 (c) 5
 (d) 0
 (e) 5

2.
 (a) 3
 (b) 3
 (c) 0
 (d) 3

3.
 (a) 6
 (b) 6
 (c) 0
 (d) $6 \div 2 = 3$

Maths Fact: 2

PAGE 57

1. 4, 4, 4, 4
 (a) 16
 (b) 4
 (c) 4
 (d) 0
 (e) $16 \div 4 = 4$
2.
 (a) 12
 (b) 4
 (c) 3
 (d) $12 \div 4 = 3$
 (e) 0
3.
 (a) 24
 (b) 4
 (c) 6
 (d) 0
 (e) $24 \div 4 = 6$

Challenge: 7

PAGE 58

1.
 (a) 16
 (b) 2
 (c) 8
 (d) $16 \div 2 = 8$
 (e) 4
 (f) 4
 (g) 0
 (h) $16 \div 4 = 4$
 (i) 5
 (j) $20 \div 4 = 5$
2.
 (a) 24
 (b) 2
 (c) 12
 (d) 0
 (e) $24 \div 2 = 12$
 (f) 4
 (g) 6
 (h) 0
 (i) $24 \div 4 = 6$
3.
 (a) 5
 (b) 3
 (c) (i) 5
 (ii) 2

Challenge: 14

PAGE 59

1.
 (a) 8
 (b) $16 \div 2 = 8$
 (c) 4
 (d) $16 \div 4 = 4$
 (e) 2
 (f) $16 \div 8 = 2$
2.
 (a) 12
 (b) $24 \div 4 = 6$
 (c) $24 \div 8 = 3$
4.
 (a) 8
 (b) 3
 (c) 3
 (d) 4
 (e) 7
 (f) 4
 (g) 6
 (h) 7
5.
 (a) 5
 (b) 8
 (c) 5
 (d) 6
 (e) 7
6.
 (a) 8
 (b) 9
 (c) 10
 (d) 2
 (e) 11
7.
 (a) 4
 (b) 6
 (c) 12
 (d) 9
 (e) 11
- PAGE 60**
1.
 (a) 24
 (b) 12
 (c) $24 \div 2 = 12$
 (d) 6
 (e) $24 \div 4 = 6$

- (f) 3
 (g) $24 \div 8 = 3$
 (h) No
 (i) Yes
2.
 (a) 0, $10 \div 2 = 5$
 (b) $20 - 4 - 4 - 4 - 4 - 4 = 0$,
 $20 \div 4 = 5$
 (c) $32 - 8 - 8 - 8 - 8 = 0$,
 $32 \div 8 = 4$
 (d) $48 - 8 - 8 - 8 - 8 - 8 = 0$,
 $48 \div 8 = 6$
 (e) $24 - 4 - 4 - 4 - 4 - 4 = 0$,
 $24 \div 4 = 6$

Maths Fact: 12

PAGE 61

1.
 (a) 8
 (b) 16
 (c) 24
 (d) 16
 (e) 24
 (f) 18
2.
 (a) X
 (b) X
 (c) X
 (d) ✓
 (e) X
3.
 (a) (i) $20 \div 2 = 10$
 (ii) $20 \div 10 = 2$
 (b) (i) $36 \div 4 = 9$
 (ii) $36 \div 9 = 4$
 (c) (i) $56 \div 8 = 7$
 (ii) $56 \div 7 = 8$
 (d) (i) $18 \div 2 = 9$
 (ii) $18 \div 9 = 2$
 (e) (i) $28 \div 7 = 4$
 (ii) $28 \div 4 = 7$

4.
 (a) $24 \div 4 = 6$
 (b) $6 \div 2 = 3$
 (c) $24 \div 3 = 8$
 (d) $16 \div 2 = 8$
 (e) $24 \div 6 = 4$
 (f) $10 \div 2 = 5$
 (g) $36 \div 4 = 9$
 (h) $20 \div 5 = 4$

PAGE 62

1. 36
 2. 3
 3. 10
 4. 26
 5. 290
 6. 70
 7. 24
 8. $4 \times 4 = 16$
 9. 56
 10. 6
 11. 8
 12. 59
 13. 76
 14. 655
 15. 9
 16. 400
 17. 5
 18. 7
 19. 7
 20. 8

PAGE 63

2.
 (a) ✓
 (b) X
 (c) ✓
 (d) ✓
 (e) ✓
 (f) X

PAGE 64

1.
 (a) ✓
 (b) X
 (c) ✓

PAGE 66

- (a) = (h)
 (b) = (j)
 (c) = (f)
 (d) = (g)
 (e) = (i)
3. (b), (c), (d), (e)

PAGE 67

1.
 (f) purple
 (g) green
 (h) yellow

(i) blue

(j) red

2. (a), (c), (d), (e)

3.

(a) $\frac{1}{2} > \frac{1}{4}$

(b) $\frac{2}{4} = \frac{1}{2}$

(c) $\frac{1}{2} < \frac{3}{4}$

(d) $\frac{2}{2} = \frac{4}{4}$

(e) $1 = \frac{4}{4}$

4.

(a) 8

(b) 4

(c) $\frac{1}{2}$ of 8 = 4

5.

(a) 16

(c) 8

(d) 8

(e) $\frac{1}{2}$ of 16 = 8

PAGE 68

1.

(a) 12

(b) 3

(c) $\frac{1}{4}$ of 12 = 3

2.

(a) 20

(b) 5

(c) $\frac{1}{4}$ of 20 = 5

3.

(a) 24

(c) 6

(d) $\frac{1}{4}$ of 24 = 6

4.

(a) 5

(b) 7

(c) 9

(d) 1

(e) 11

(f) 20

(g) 12

(h) 15

5.

(a) 4

(b) 7

(c) 9

(d) 5

(e) 1

(f) 10

(g) 2

(h) 12

(i) 8

(j) $\frac{1}{4}$

(k) 3

(l) 6

6. $\frac{1}{4}$ of 44 = 11

7. $12 + 6 = 18$

Challenge: 24

PAGE 69

1.

(a) 3

(b) 3

(c) $2, 3 + 3 = 6$

2.

(a) 4

(b) 8

(c) 16

(d) 20

(e) 24

3. 10, 18, 24, 40, 4, 14, 22, 2, 8

4. 2, 8

5.

(a) 12

(b) 20

(c) 16

(d) 24

(e) 16

6. 8, 28, 40, 4, 44, 80, 48, 20, 32

PAGE 70

1.

(a) (i) $\frac{3}{8}$
(ii) $\frac{5}{8}$

(b) (i) $\frac{3}{4}$
(ii) $\frac{1}{4}$

(c) (i) $\frac{1}{2}$
(ii) $\frac{1}{2}$

(d) (i) $\frac{7}{8}$
(ii) $\frac{1}{8}$

2.

(a) $\frac{2}{8}$ or $\frac{1}{4}$

(b) $\frac{4}{8}, \frac{1}{2}$ or $\frac{2}{4}$

(c) $\frac{6}{8}$ or $\frac{3}{4}$

4.

(a) $\frac{1}{2} > \frac{3}{8}$

(b) $\frac{3}{4} < \frac{7}{8}$

(c) $\frac{4}{4} = \frac{8}{8}$

(d) $\frac{3}{4} > \frac{3}{8}$

(e) $\frac{5}{8} > \frac{1}{2}$

(f) $\frac{2}{4} = \frac{1}{2}$

(g) $\frac{7}{8} > \frac{2}{8}$

(h) $\frac{2}{2} > \frac{3}{4}$

(i) $\frac{8}{8} = \frac{2}{2}$

(j) $\frac{6}{8} = \frac{3}{4}$

Challenge: $\frac{3}{8}$

PAGE 71

1.

(a) 32

(b) 4

(c) $\frac{1}{8}$ of 32 = 4

2.

(a) 40

(d) 5

(e) $\frac{1}{8}$ of 40 = 5

3.

(a) 48

(d) 6

(e) $\frac{1}{8}$ of 48 = 6

4.

(a) 2

(b) 1

(c) 7

(d) 3

(e) 9

(f) 8

(g) 10

(h) 4

5. 5

6. 9

Challenge: 7

PAGE 72

1. 24

2. (a) 5

(c) 40

3.

(a) 6

(c) 48

4. 8, 56, 72, 48, 64, 80, 88, 32, 40, 24, 96

5. 72

6. 88

Challenge: 64

PAGE 73

1.

(a) $\frac{2}{4}$

(b) $\frac{4}{4}$

(c) $\frac{2}{8}$

(d) $\frac{1}{2}$

(e) $\frac{1}{2}$

(f) $\frac{2}{4}$

(g) $\frac{3}{4}$

(h) $\frac{4}{4}$

(i) $\frac{2}{2}$

(j) $\frac{6}{8}$

2.

(a) $\frac{1}{2}$

(b) $\frac{3}{4}$

(c) $\frac{7}{8}$

(d) $\frac{3}{4}$

(e) $\frac{1}{2}$

(f) $\frac{7}{8}$

(g) $\frac{3}{4}$

(h) $\frac{5}{8}$

4.

(a) $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}$

(b) $\frac{1}{2}, \frac{3}{4}, \frac{7}{8}$

(c) $\frac{1}{2}, \frac{5}{8}, \frac{3}{4}$

(d) $\frac{1}{4}, \frac{3}{8}, \frac{1}{2}$

5. Banana

Challenge: $\frac{1}{8}$

PAGE 74

- 1.**
(a) 150c
(b) 375c
(c) €3.45
(d) 570c
(e) €1.08
(f) €0.43
(g) 8c
(h) €0.07
(i) 309c
(j) 510c
(k) €5.89
(l) 999c
- 2.**
(a) €0.70, 75c, 107c, €1.77, €7.00
(b) €3.14, 340c, €3.41, 430c, 443c
(c) 55c, €5.00, €5.05 550c, 555c
(d) €2.49, €2.94, 429c, €9.42
- 3.**
(a) €2.24
(b) €1.55
(c) €3.53
(d) €2.37

PAGE 75

- 1.**
(a) €2.70
(b) €3.55
(c) €3.76
(d) €3.07
(e) €3.41
(f) €3.57
(g) Jimmy
(h) Mary
(i) 16c
(j) 48c
(k) €2.36
(l) €3.78
- 2.**
(a) Mary has €2.70 needs to save €2.30
(b) Jane has €3.55 needs to save €1.45
(c) Jimmy has €3.76 needs to save €1.24
(d) Jack has €3.07 needs to save €1.93

- (e)** Jill has €3.41 needs to save €1.59
(f) Joe has €3.57 needs to save €1.43

PAGE 76

- 1.**
(a) €2, 20c, 20c, 5c
(b) €2, €1, 50c, 20c, 2c
(c) €2, €2, 50c, 20c, 20c, 5c
(d) €2, 50c, 10c, 5c, 2c, 1c
(e) €2, €1, 50c, 20c, 20c, 1c
(f) €2, €2, 50c, 10c, 5c
- 2.**
(a) €2.55
(b) €3.75
(c) €4.45
(d) €3.58
(e) €3.05
(f) €4.15
(g) €4.37
(h) €3.18
- 3.** €0.85
- 4.** €4.20
- Challenge:** (a) €3.30
 (b) €1.45

PAGE 77

- 1.** $\frac{3}{8}$
2. $\frac{5}{8}$
3. (d)
5. $\frac{1}{4}$ and $\frac{2}{8}$
6. $\frac{1}{2}$
7. 9
8. 6
9. (a)
10. 12
11. 40
12. (c)
13. €1.50
14. $\frac{3}{4}$
15. 9
16. €4.75
17. 6
18. 56
19. 435
20. 6

PAGE 78

- 1.**
 $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 24$
- 2.**
(a) $6 \rightarrow 2 \times 3 = 6$
(b) $9 \rightarrow 3 \times 3 = 9$
(c) $12 \rightarrow 4 \times 3 = 12$
(d) $15 \rightarrow 5 \times 3 = 15$
(e) $18 \rightarrow 6 \times 3 = 18$
- 3.**
(a) 3, 6, 9
(b) 12, 15, 18
(c) 21, 24, 27, 30
- 4.**
(a) 6
(b) 18
(c) 21
(d) 9
(e) 15
(f) 27
(g) 24
(h) 0
(i) 12

Maths Fact: 27

PAGE 79

- 1.**
 9, 15, 3, 21, 18, 6, 30, 24, 27
- 2.**
(a) 9
(b) 24
(c) 18
(d) 30
(e) 27
(f) 12
(g) 15
(h) 33
- 3.**
(a) $5 \times 3 = 15$
(b) $4 \times 3 = 12$
(c) $2 \times 3 = 6$
(d) $10 \times 3 = 30$
(e) $7 \times 3 = 21$
(f) $11 \times 3 = 33$

- 4.**
(a) 3, 6, 9
(b) 9, 12, 15
(c) 6, 9, 12, 15, 18
(d) 15, 18, 21
(e) 27, 30, 33
(f) 12, 15, 18, 21, 24
(g) 24, 27, 30
(h) 18, 21, 24
(i) 24, 27, 30, 33, 36

- 5.**
 $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 24$
 $8 \times 3 = 24$

- 6.**
(a) €9
(b) €15
(c) €12
(d) €27
(e) €30
(f) €36

Maths Fact: 36

PAGE 80

- 1.**
 $6 + 6 + 6 + 6 + 6 + 6 + 6 = 36$
- 2.**
(a) 18
(b) 30
(c) 54
(d) 48
(e) 60
(f) 24
- 3.**
(a) $12 \rightarrow 2 \times 6 = 12$
(b) $18 \rightarrow 3 \times 6 = 18$
(c) $24 \rightarrow 4 \times 6 = 24$
(d) $30 \rightarrow 5 \times 6 = 30$
(e) $36 \rightarrow 6 \times 6 = 36$

- 4.**
(a) 24, 30
(b) 36, 42, 48, 54, 60
(c) (i) $3 \times 6 = 18$
 (ii) $8 \times 6 = 48$
(d) 42, 48, 54

Maths Fact: 54

PAGE 81

1.
 (a) $3 \times 6 = 18$
 (b) (i) 12
 (ii) 24
 (iii) 42
 (iv) 54
 (v) 30
 (vi) 60
2.
 (a) 48
 (b) 54
 (c) 30
 (d) 42
 (e) 60
 (f) 72
3.
 (a) 18
 (b) 42
 (c) 0
 (d) 6
 (e) 6
 (f) 6
 (g) 5
 (h) 9
4.
 (a) 36
 (b) 18
 (c) 66
 (d) 12
 (e) 54
 (f) 24
5.
 (a) 6
 (b) 24
 (c) 48
 (d) 30
 (e) 60
 (f) 54
 (g) 18
 (h) 42
 (i) 66
6.
 12, 30, 18, 42, 36

Maths Fact: 48

PAGE 82

1.
 $9+9+9+9+9+9+9+9+9=81$
 (a) $9+9+9=27 \rightarrow 3 \times 9=27$
 (b) $9+9+9+9+9=45 \rightarrow 5 \times 9=45$
 (c) $9+9+9+9=36 \rightarrow 4 \times 9=36$
2.
 (a) 18
 (b) 54
 (c) 90
 (d) 81
 (e) 63
 (f) 36
 (g) 9
 (h) 72
3.
 36, 9, 27, 18, 54, 72, 90, 81, 63
4.
 (a) 36
 (b) 18
 (c) 45
 (d) 9
 (e) 9
 (f) 9
 (g) 90
 (h) 63
5.
 (a) $9 \times 9 = 81$
 (b) $6 \times 9 = 54$
 (c) $10 \times 9 = 90$
 (d) $8 \times 9 = 72$

Maths Fact: 72

PAGE 83

1.
 (a) $5 \times 9 = 45$
 (b) $3 \times 9 = 27$
 (c) $8 \times 9 = 72$
 (d) $6 \times 9 = 54$
 (e) $9 \times 9 = 81$
 (f) $4 \times 9 = 36$

2.
 (a) 63
 (b) 108

- (c) 36
 (d) 81
 (e) 18
 (f) 54

3.
 (a) 27
 (b) 81
 (c) 45
 (d) 90
 (e) 18
 (f) 54
 (g) 36
 (h) 72

4.
 (a) 2×9
 (b) 3×9
 (c) 6×9
 (d) 10×9
 (e) 4×9
 (f) 7×9
 (g) 12×9
 (h) 9×9

5. 27, 36, 54, 45, 108, 99, 9, 63, 81, 90, 72
 (a) $9 \times 3 = 27$
 (b) $9 \times 5 = 45$
 (c) $9 \times 7 = 63$
 (d) $9 \times 4 = 36$
 (e) $9 \times 6 = 54$
 (f) $9 \times 8 = 72$

6.
 (a) $18, 9 \times 2 = 18$
 (b) $99, 9 \times 11 = 99$
 (c) $63, 9 \times 7 = 63$
 (d) $108, 9 \times 12 = 108$

Maths Fact: 108

PAGE 84

1.
 (a) 7
 (b) $21 \div 3 = 7$
 (c) $21 - 7 = 14, 14 - 7 = 7 - 7 = 0$
 (d) $21 \div 7 = 3$

2.
 (a) 4

- (b) $12 \div 3 = 4$
3.
 (a) 15
 (b) 5
 (c) $15 \div 5 = 3$
 (d) 0

4.
 (a) €3.33
 (b) 1c

Maths Fact: 11

PAGE 85

1.
 (a) 24
 (b) 6
 (c) 4
 (d) $24 \div 6 = 4$
 (e) 0

2.
 (a) 18
 (b) 6
 (c) 3
 (d) $18 \div 6 = 3$
 (e) 0

3.
 (a) 45
 (b) 9
 (c) $45 \div 9 = 5$

4.
 (a) 36
 (b) 6
 (c) $36 \div 6 = 6$
 (d) 9
 (e) $36 \div 9 = 4$

Challenge: (a) $54 \div 6 = 9$
 (b) $54 \div 9 = 6$

PAGE 86

1.
 (a) 12
 (b) 6
 (c) 4
 (d) $36 \div 6 = 6$
 (e) 4

2.

- (a) 21
 (b) 7
 (c) 3
 (d) $21 \div 3 = 7$
 (e) $\frac{7}{21}$

3.
 (a) 36
 (b) $36 \div 6 = 6$
 (c) $36 \div 9 = 4$
 (d) $36 \div 3 = 12$
 (e) $\frac{4}{36}$

4.
 (a) 5
 (b) 9
 (c) 10
 (d) 11

5.
 (a) 3
 (b) 4
 (c) 5
 (d) 7

6.
 (a) 4
 (b) 6
 (c) 8
 (d) 10

Challenge: 22

PAGE 87

- ... is an island.
- ... 20 minutes without stopping.
- ... speak Spanish.
- ... the shortest month.
- ... be snowy.
- ... the sun.
- ... can turn into ice.
- ... a woman.

PAGE 88

- ... dry.
- ... cross.
- ... continue to bounce.
- ... have lots of fun.
- ... will not smash.

6. ... melt by tomorrow.

Challenge: • It is likely that the food will be burnt.
 • It is unlikely that the food will be cold.

PAGE 89

1. Class discussion.

2.
 (a) Class discussion.
 (b) Class discussion.
 (c) Class discussion.
 (d) Class discussion.
 (e) 2, 3, 1
 (f) 2, 1, 3

Challenge: Class discussion.

PAGE 90

- most likely: yellow
 least likely: green
- (a) blue: possible
 red: likely
 green: possible
 (b) blue: likely
 red: unlikely
 green: impossible
 (c) blue: certain
 red: impossible
 green: impossible
 (d) blue: likely
 red: impossible
 green: likely
- (a) likely
 (b) certain
 (c) unlikely
 (d) impossible
 (e) impossible
 (f) unlikely

PAGE 91

- 18
- 45
- 42
- 9
- 72
- (b)

7. (b)
 8. 420
 9. 9
 10. 10
 11. 660c
 12. 735
 13. €1·80
 14. 63
 15. €4·65
 16. 10
 17. (d)
 18. €2·20
 19. 4
 20. 9

PAGE 92

- (a) 7 o'clock
 (b) half past 4
 (c) $\frac{1}{4}$ past 10
 (d) $\frac{1}{4}$ to 2

3. Brian

4.
 (a) 60
 (b) 30
 (c) 15
 (d) 45
 (e) 90
 (f) 75

5.
 (a) $\frac{1}{4}$ to 4
 (b) $\frac{1}{4}$ to 8

Challenge: 30

PAGE 93

- 5
 3.
 (a) 5
 (b) 5
 (c) (i) 20
 (ii) 25
 (iii) $\frac{1}{2}$
 (d) 20, 25, 30
4.
 (a) 30, 25, 20, 15, 10, 5, 0
 (b) hour

- (c) 25
 (d) (i) 20
 (ii) 15
 (iii) 10
 (iv) 5
 (v) hour

5.
 (a) 20 past 8
 (b) 25 past 2
 (c) 25 to 10
 (d) 20 to 3

Challenge: 30

PAGE 94

- 25 past 7
 20 past 9
 $\frac{1}{2}$ past 12
 $\frac{1}{2}$ past 8
 $\frac{1}{2}$ past 4
- 10 to 3
 20 to 5
 5 to 8
 7 o'clock
 12 o'clock
- 5, 10, 20, 25, 30, 35, 40, 45,
 50, 55, 60

6.
 15, 30, 20, 15, 35

Challenge: 20 past 7

PAGE 95

- (a) (i) $\frac{1}{4}$ past 7
 (ii) 7:15
 (b) (i) 25 past 9
 (ii) 9:25
 (c) (i) 10 past 11
 (ii) 11:10
 (d) (i) $\frac{1}{2}$ past 10
 (ii) 10:30

- 2.**
(a) (i) 25 to 5
 (ii) 4:35
(b) (i) 20 to 4
 (ii) 3:40
(c) (i) $\frac{1}{4}$ to 2
 (ii) 1:45
(d) (i) 5 to 6
 (ii) 5:55

- 3.**
 25 past 12 \rightarrow 12:25
 25 to 7 \rightarrow 6:35
 8 o'clock \rightarrow 8:00
 25 to 12 \rightarrow 11:35

- 4.**
 $\frac{1}{4}$ to 6 \rightarrow 5:45
 20 to 9 \rightarrow 8:40
 25 to 5 \rightarrow 4:35
 10 o'clock \rightarrow 10:00

PAGE 96

- (a)** 4:30
(b) 7:50
(c) 10:00
(d) 3:15
(e) 1:20
- 2.**
(a) $\frac{1}{2}$ past 5
(b) 20 to 9
(c) $\frac{1}{4}$ past 1
(d) 10 past 12

- 3.**
(a) 3:35
(b) 7:15
(c) 8:55
(d) 9:45
(e) 11:20

- 4.**
(a) 5 past 7
(b) $\frac{1}{4}$ past 1
(c) $\frac{1}{4}$ to 4
(d) 10 to 11

5. BRENDA

- 6.**
(a) (i) 10 to 2
 (ii) 1:50
(b) (i) 5 to 2
 (ii) 1:55

- (c)** (i) 2 o'clock
 (ii) 2:00
(d) (i) 5 past 2
 (ii) 2:05
(e) (i) 10 past 2
 (ii) 2:10
- Challenge:** (a) Joe
 (b) 10 minutes

PAGE 97

- 1.**
 $5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 45$
(a) 10
(b) 30
(c) 35
(d) 25
(e) 40
(f) 50
(g) 5
(h) 55

- 2.**
 $10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 80$
(a) 30
(b) 70
(c) 50
(d) 40
(e) 60
(f) 20
(g) 90
(h) 100

- 3.**
(a) 35
(b) 80
(c) 25
(d) 60
(e) 10
(f) 5
(g) 9
(h) 3

- 4.**
(a) 20
(b) 10
(c) 50, 70
(d) 20
(e) 40
(f) 40, 50, 55

- 5.**
(a) 70
(b) 30
(c) 90
(d) 50
(e) 80
(f) 110

Maths Fact: 70

PAGE 98

- 1.** $10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 70$
- 2.**
(c) $3 \times 10 = 30$
(d) $80 \rightarrow 8 \times 10 = 80$
(e) $25 \rightarrow 5 \times 5 = 25$
(f) $45 \rightarrow 5 \times 9 = 45$
(g) $60 \rightarrow 5 \times 12 = 60$

- 3.**
(a) 30
(b) 80
(c) 50
(d) 90
(e) 100
(c) 20

- 4.**
 $4 \times 5 = 20$
 $5 \times 5 = 25$
 $3 \times 5 = 15$
 $10 \times 5 = 50$

- $4 \times 10 = 40$
 $5 \times 10 = 50$
 $3 \times 10 = 30$
 $10 \times 10 = 100$

Maths Fact: 100

PAGE 99

- 1.**
 $1 \times 5 = 5 / 5 \div 5 = 1$
 $2 \times 5 = 10 / 10 \div 5 = 2$
 $3 \times 5 = 15 / 15 \div 5 = 3$
 $4 \times 5 = 20 / 20 \div 5 = 4$
 $5 \times 5 = 25 / 25 \div 5 = 5$
 $6 \times 5 = 30 / 30 \div 5 = 6$
 $7 \times 5 = 35 / 35 \div 5 = 7$
 $8 \times 5 = 40 / 40 \div 5 = 8$
 $9 \times 5 = 45 / 45 \div 5 = 9$
 $10 \times 5 = 50 / 50 \div 5 = 10$

- 2.**
 • 7
 • 5
 • 8
 • 3
 • 12

- 3.**
 $50 \div 5 = 10$
 $10 \div 5 = 2$
 $55 \div 5 = 11$
 $45 \div 5 = 9$
 $35 \div 5 = 7$

PAGE 100

- 1.**
 $1 \times 10 = 10 / 10 \div 10 = 1$
 $2 \times 10 = 20 / 20 \div 10 = 2$
 $3 \times 10 = 30 / 30 \div 10 = 3$
 $4 \times 10 = 40 / 40 \div 10 = 4$
 $5 \times 10 = 50 / 50 \div 10 = 5$
 $6 \times 10 = 60 / 60 \div 10 = 6$
 $7 \times 10 = 70 / 70 \div 10 = 7$
 $8 \times 10 = 80 / 80 \div 10 = 8$
 $9 \times 10 = 90 / 90 \div 10 = 9$
 $10 \times 10 = 100 / 100 \div 10 = 10$

- 2.**
(a) $80 \div 10 = 8$
 $30 \div 10 = 3$
 $100 \div 10 = 10$
 $110 \div 10 = 11$

- (b)** $60 \div 10 = 6$
 $70 \div 10 = 7$
 $90 \div 10 = 9$
 $50 \div 10 = 5$

- 3.**
(a) Music
(b) History
(c) English
(d) Science

PAGE 101

- 1.**
 $7 \times 5 = 35 / 35 \div 5 = 7$
 $6 \times 5 = 30 / 30 \div 5 = 6$
 $1 \times 5 = 5 / 5 \div 5 = 1$
 $4 \times 5 = 20 / 20 \div 5 = 4$
 $9 \times 5 = 45 / 45 \div 5 = 9$
- $2 \times 10 = 20 / 20 \div 10 = 2$
 $5 \times 10 = 50 / 50 \div 10 = 5$
 $8 \times 10 = 80 / 80 \div 10 = 8$
 $3 \times 10 = 30 / 30 \div 10 = 3$
 $10 \times 10 = 100 / 100 \div 10 = 10$

2.
 (a) 4
 (b) 2
 (c) 10
 (d) 5
 (e) 9
 (f) 5
3.
 (a) $6: 60 \div 10 = 6$ or

$$\begin{array}{r} 10 \overline{)60} \\ \underline{60} \\ 0 \end{array} = 6$$

 (b) $7: 35 \div 5 = 7$
 (c) $9: 45 \div 5 = 9$
 (d) $9: 90 \div 10 = 9$
 (e) $11: 55 \div 5 = 11$

PAGE 102

3.
 (a) (i) $\frac{3}{4}$
 (ii) $\frac{1}{4}$
 (b) (i) $\frac{6}{8}$ or $\frac{3}{4}$
 (ii) $\frac{2}{8}$ or $\frac{1}{4}$
 (c) (i) $\frac{3}{8}$
 (ii) $\frac{5}{8}$
 (d) (i) $\frac{5}{8}$
 (ii) $\frac{2}{8}$
4.
 (e) $\frac{1}{2}$ or $\frac{2}{4}$ or $\frac{4}{8}$
 (f) $\frac{6}{8}$ or $\frac{3}{4}$
 (g) $\frac{3}{8}$
 (h) $\frac{1}{4}$ or $\frac{2}{8}$

PAGE 103

- (a) 2
 (b) $2\frac{1}{2}$
 (c) 3
 (d) $3\frac{1}{2}$
 (e) $4\frac{1}{2}$

2.
 (a) 1
 (b) $1\frac{1}{4}$
 (c) $1\frac{3}{4}$
 (d) 2
 (e) $2\frac{1}{4}$

3.
 (a) 1
 (b) $1\frac{1}{8}$

- (c) $1\frac{3}{8}$
 (d) $1\frac{3}{8}$
 (e) $1\frac{7}{8}$
 Challenge: $\frac{1}{8}$

PAGE 104

- (a) 14
 (b) 24
 (c) 40

2.
 (a) 9
 (b) 12
 (c) 30
 (d) 7
 (e) 9
 (f) 12
 (g) 4
 (h) 7
 (i) 9

4.
 (a) $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}$
 (b) $\frac{1}{4}, \frac{3}{8}, \frac{1}{2}$
 (c) $\frac{1}{2}, \frac{3}{4}, \frac{7}{8}$
 (d) $\frac{5}{8}, \frac{3}{4}, \frac{2}{2}$

5.
 (a) $1\frac{1}{2}$
 (b) $1\frac{1}{4}$
 (c) $1\frac{1}{8}$

6.
 (a) $\frac{9}{2}$ or $4\frac{1}{2}$
 (b) $\frac{11}{2}$ or $5\frac{1}{2}$
 (c) $\frac{13}{4}$ or $3\frac{1}{4}$
 (d) $\frac{17}{4}$ or $4\frac{1}{4}$
 (e) $\frac{11}{8}$ or $1\frac{3}{8}$
 (f) $\frac{15}{8}$ or $1\frac{7}{8}$

7.
 (a) 5
 (b) 9
 (c) 3
 (d) 6
 (e) 9
 (f) 12
 (g) 7
 (h) 7
 (i) 9
 (j) 10

PAGE 105

1.
 (a) (i) $\frac{3}{10}$
 (ii) $\frac{7}{10}$
 (b) (i) $\frac{1}{10}$
 (ii) $\frac{9}{10}$
 (c) (i) $\frac{4}{10}$
 (ii) $\frac{6}{10}$

3. $\frac{1}{10}$

4.
 (a) 2
 (b) 1

5.
 (a) 4
 (b) 6
 (c) 8
 (d) 5
 (e) 7
 (f) 1
 (g) 3
 (h) 9

PAGE 106

1.
 (a) $3 \times 10 = 30$
 (b) $2, 2 \times 10 = 20$
 (c) $5, 5 \times 10 = 50$
2.
 (a) $6 \times 10 = 60$
 (b) $7, 7 \times 10 = 70$
 (c) $9, 9 \times 10 = 90$

3.
 (a) 30
 (b) 80
 (c) 100
 (d) 70
 (e) 90

4.
 (a) 60
 (b) 70
 (c) 10

PAGE 107

1.
 (a) 2
 (b) 10
 (c) 5
 (d) 2

2.
 (a) $\frac{1}{2}$
 (b) $\frac{6}{10}$
 (c) $\frac{1}{2}$
 (d) $\frac{8}{10}$
 (e) $\frac{2}{2}$

3. 6, 18

4.
 (a) Andy
 (b) 5c

5.
 (a) $\frac{2}{10}, \frac{3}{10}, \frac{4}{10}, \frac{5}{10}, \frac{6}{10}, \frac{7}{10},$
 $\frac{8}{10}, \frac{9}{10}, \frac{10}{10}$
 (b) 10
 (c) 5

6. 90

7. €2

8.
 (a) Susan
 (b) 10

9. €1.50

Challenge: €1

PAGE 108

1.
 (a) $\frac{1}{2}$ of 20 $>$ $\frac{1}{4}$ of 24
 (b) $\frac{1}{4}$ of 12 $>$ $\frac{1}{10}$ of 20
 (c) $\frac{1}{8}$ of 80 $>$ $\frac{1}{10}$ of 90
 (d) $\frac{1}{10}$ of 50 $<$ $\frac{1}{2}$ of 20
 (e) $\frac{1}{10}$ of 40 $<$ $\frac{1}{4}$ of 40
 (f) $\frac{1}{2}$ of 18 $>$ $\frac{1}{8}$ of 64
 (g) $\frac{1}{4}$ of 36 = $\frac{1}{10}$ of 90
 (h) $\frac{1}{8}$ of 72 $<$ $\frac{1}{10}$ of 100
 (i) $\frac{1}{10}$ of 60 = $\frac{1}{2}$ of 12

2.
 (a) 20
 (b) 9
 (c) 8
 (d) 7

- (e) Marie
(f) Aideen

3.
(a) 9
(b) 7
(c) 9
(d) 4
(e) 10

4.
(a) $5\frac{1}{2}$
(b) $3\frac{3}{4}$
(c) $10\frac{1}{2}$
(d) $1\frac{3}{10}$
(e) $1\frac{9}{10}$

5. 6
6. 38
7. 17
8. 12

Challenge: 52

PAGE 109

1. 48
2. 11
3. 20 to 2
4. 5 to 7
5. 320
6. 42
7. 7
9. €4.55
10. All boxes
11. 11:25
12. 3:50
13. $4\frac{3}{4}$
14. $\frac{1}{8}$ of 24 < $\frac{1}{10}$ of 70
15. 9
16. 50
17. 8
18. 25
19. 5:25
20. 35

PAGE 110

3.
(a) 1:3
(b) 1:5
(c) 2:6
(d) 2:7
(e) 4:1
(f) 3:5

PAGE 111

- (b) 0.4, zero point four
(c) $\frac{7}{10}$, zero point seven
(e) $2\frac{1}{2}$, 2 point 5
(f) $3\frac{2}{10}$, 3.2, three point two
(g) $2\frac{9}{10}$, 2.9, two point nine
(h) $2\frac{1}{10}$, 2.1, two point one
(i) 3.3, three point three
(j) $3\frac{8}{10}$, three point eight
(k) 1, one
(l) $1\frac{7}{10}$, 1.7
(m) $2\frac{8}{10}$, 2.8
(n) $2\frac{6}{10}$, 2.6, two point six

Challenge: $\frac{1}{2}$, 0.5, zero point five

PAGE 112

2.
(b) 12.4
(c) 10.6
(d) 13.7
(e) 14.2

4.
(a) 23.2
(b) 99.6
(c) 92.9
(d) 54.5

PAGE 113

2.
(a) $\frac{3}{10}$, $\frac{4}{10}$, $\frac{6}{10}$, $\frac{7}{10}$, $\frac{9}{10}$, $1\frac{1}{10}$
(b) 0.3, 0.4, 0.5, 0.7, 0.8, 0.9, 1.0, 1.2
(c) 1.8, 2.0, 2.1, 2.5, 2.6
(d) 13.0, 13.1, 13.4, 13.5, 13.8

3.
(a) 0.2, 0.8
(b) 0.1, 0.7
(c) 1.1, 1.8
(d) 4.3, 4.8

4.
(b) $\frac{3}{10} > 0.2$
(c) $\frac{5}{10} < 0.6$
(d) $\frac{9}{10} = 0.9$

5.
(a) $0.3 < \frac{4}{10}$
(b) $0.7 < \frac{8}{10}$
(c) $0.2 < \frac{4}{10}$
(d) $\frac{10}{10} = 1.0$

6.
(a) $1\frac{1}{10} < 1.2$
(b) $1\frac{9}{10} > 1.6$
(c) $1\frac{5}{10} = 1.5$
(d) $1\frac{7}{10} < 1.9$

7.
(a) $1.6 = 1\frac{6}{10}$
(b) $1.3 < 1\frac{5}{10}$
(c) $1.6 > 1\frac{3}{10}$
(d) $1.8 > 1\frac{6}{10}$

PAGE 114

1. (c), (a), (b), (d)

2.
(a) 0.9, 0.8, 0.03
(b) 0.9, 0.5, 0.1
(c) 1.8, 1.7, 1.0
(d) 1.6, 1.4, 1.2

3.
(a) 0.9, 3.9, 9
(b) 0.1, 1.0, 11.0
(c) 68.8, 85.6, 98.6

4.
(a) X
(b) ✓
(c) ✓
(d) X
(e) ✓
(f) X
(g) ✓
(h) X

PAGE 115

1.
(a) circle
(b) cylinder
(c) triangle
(d) oval
(e) cube
(f) sphere
(g) rectangle
(h) cone
(i) cuboid
(j) semi-circle

2.
(a)
1. ball
2. marble
3. planet

- (b)
1. ice cream cone
2. traffic cone
3. witch's hat

- (c)
1. cereal box
2. television
3. book
3.
(a) square
(b) rectangle
(c) rectangle and circle

4.
circle – it's a 2-D shape

PAGE 116

1.
(a) cone
(b) cylinder
(c) cube
(d) sphere and cylinder
(e) cylinder
(f) sphere
(g) cuboid and cube
(h) cone

2.
(a) (i) sphere, cone, cylinder
(ii) cube, cuboid, cylinder, cone
(b) The cylinder and cone can both roll and slide.

PAGE 117

1.
(a) 5, 8, 5
(b) square, triangles

2.
(a) 5, 9, 6
(b) triangles, rectangles

- 3.**
(a) sphere
(b) cone
(c) triangular prism
(d) cylinder
(e) cube
(f) pyramid
(g) cube
(h) triangular prism

Challenge: 9

PAGE 118

- 1.**
(a) cuboid
(b) triangular prism
(c) cone
(d) cylinder
(e) pyramid

- 2.**
(a) 12, 8
(b) 6, 0, 12, 8
(c) 1, 1, 2, 0
(d) 1, 1, 1, 1
(e) 5, 0, 8, 5
(f) 5, 0, 9, 6

PAGE 119

- 1.**
 Red: 5cm
 Blue: 3cm
 Yellow: 7cm
 Purple: 1cm
 Orange: 6cm
 Green: 5cm

- 2.**
 4cm, 2cm, 4cm, 3cm, 5cm,
 4cm, 3cm = 25cm

- 3.**
(a) 100cm
(b) 50cm
(c) 75cm
(d) 90cm
(e) 200cm
(f) 45cm
(g) 500cm
(h) 100cm or 1m

Challenge: 13.5cm

PAGE 120

- (a)** 1m 26cm
(b) 1m 40cm
(c) 1m 93cm
(d) 1m 4cm
(e) 2m 0cm
(f) 2m 86cm
(g) 3m 80cm
(h) 4m 1cm
(i) 4m 44cm
(j) 5m 37cm
(k) 8m 69cm
(l) 9m 8cm

- 2.**
(a) 123cm
(b) 194cm
(c) 142cm
(d) 103cm
(e) 266cm
(f) 217cm
(g) 290cm
(h) 211cm
(i) 308cm
(j) 300cm
(k) 406cm
(l) 445cm
(m) 558cm
(n) 710cm
(o) 619cm
(p) 972cm
(q) 909cm
(r) 801cm

PAGE 121

- 1.**
(a) 2m 54cm
(b) 3m 38cm
(c) 3m 53cm
(d) 4m 40cm
(e) 8m 14cm

- 2.** 4m 05cm

- 3.**
(a) 2m 55cm
(b) 3m 61cm
(c) 82cm
(d) 2m 04cm
(e) 1m 28cm

Challenge: 2m 87cm

PAGE 122

- 1.** 2m 83cm
2. 7m 50cm
3. 1m 17cm
4. irregular hexagon
5. (a) Ronan
 (b) 76cm
6. 5m 49cm
7. (a) Tilly
 (b) 3m 56cm

Challenge: 8m 44cm

PAGE 123

- 1.**
(a) 28
(b) 42
(c) 63
(d) 49
(e) 14
(f) 70

- 2.**
(a) 28
(b) 42
(c) 63
(d) 56
(e) 21
(f) 35
(g) 70
(h) 84

- 3.**
(a) $7 + 7 + 7 + 7 = 28 \rightarrow 4 \times 7 = 28$
(b) $7 + 7 + 7 + 7 + 7 + 7 = 42 \rightarrow 6 \times 7 = 42$
(c) $7 + 7 + 7 = 21 \rightarrow 3 \times 7 = 21$
(d) $7 + 7 + 7 + 7 + 7 = 35 \rightarrow 5 \times 7 = 35$
(e) $7 + 7 + 7 + 7 + 7 + 7 + 7 = 49 \rightarrow 7 \times 7 = 49$

- 4.** 0, 14, 28, 42, 49, 56, 70

- 5.**
(a) 28
(b) 49
(c) 14
(d) 35
(e) 56
(f) 70

- 6.**
(a) 10:14
(b) 10:21
(c) 10:28
(d) 10:35
(e) 10:49
(f) 11:03

PAGE 124

- 1.**
(a) $21 + 10 = 31$, fall back 3 = 28
(b) $28 + 10 = 38$, fall back 3 = 35
(c) $35 + 10 = 45$, fall back 3 = 42
(d) $42 + 10 = 52$, fall back 3 = 49
(e) $49 + 10 = 59$, fall back 3 = 56
(f) $56 + 10 = 66$, fall back 3 = 63
(g) $63 + 10 = 73$, fall back 3 = 70
(h) 14, 21, 28, 35, 42, 49, 56, 63, 70

- 2.**
(a) 35
(b) 21
(c) 28
(d) 42
(e) 28, 14, 21, 35

- 3.**
(a) 49
(b) 35
(c) 21
(d) 28
(e) 56
(f) 42
(g) 70
(h) 84
(i) 77

Challenge: 49

PAGE 125

- 1.**
(a) 28
(b) 7
(c) 4

- (d) (i) $28 \div 7 = 4$
 (ii) $7 \overline{)28}$
 4
 (iii) $7 \overline{)28}$
 4
 (iv) $28/7 = 4$

- 2.**
 (a) $35 - 7 - 7 - 7 - 7 - 7 = 0$
 (b) 5, 5
 (c) (i) $35 \div 7 = 5$
 (ii) $7 \overline{)35}$
 5
 (iii) $7 \overline{)35}$
 5
 0
 (iv) $35/7 = 5$

- 3.**
 (a) $21 - 7 - 7 - 7 = 0 \rightarrow 21 \div 7 = 3$
 (b) $56 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 = 0 \rightarrow 7 \overline{)56}$
 8
 (c) $49 - 7 - 7 - 7 - 7 - 7 - 7 - 7 = 0 \rightarrow 49/7 = 7$
 (d) $63 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 = 0 \rightarrow 7 \overline{)63}$
 9
 (e) $42 - 7 - 7 - 7 - 7 - 7 - 7 = 0 \rightarrow 7 \overline{)42}$
 6

- 4.**
 (b) $3 \times 7 = 21$ so $21 \div 7 = 3$
 (c) $5 \times 7 = 35$ so $35 \div 7 = 5$
 (d) $6 \times 7 = 42$ so $42 \div 7 = 6$
 (e) $10 \times 7 = 70$ so $70 \div 7 = 10$
 (f) $7 \times 7 = 49$ so $49 \div 7 = 7$
 (g) $8 \times 7 = 56$ so $56 \div 7 = 8$
 (h) $9 \times 7 = 63$ so $63 \div 7 = 9$
 (i) $7 \times 11 = 77$ so $77 \div 7 = 11$
 (j) $12 \times 7 = 84$ so $84 \div 7 = 12$

PAGE 126

- 1.**
 (a) (i) $5 \times 7 = 35$
 (ii) $7 \times 5 = 35$
 (iii) $35 \div 5 = 7$
 (iv) $35 \div 7 = 5$
 (b) (i) $8 \times 7 = 56$
 (ii) $7 \times 8 = 56$
 (iii) $56 \div 8 = 7$
 (iv) $56 \div 7 = 8$

- 2.**
 (a) $42 \div 6 = 7$
 (b) $7 \overline{)21}$
 3
 (c) $7 \overline{)28}$
 4

- (d) $56/7 = 8$
 (e) $49/7 = 7$

- 3.**
 5 shots $\rightarrow 35 \div 7 = 5$
 8 shots $\rightarrow 56 \div 7 = 8$
 10 shots $\rightarrow 70 \div 7 = 10$
 9 shots $\rightarrow 63 \div 7 = 9$

- 4.**
 (a) 8
 (b) 4
 (c) 7
 (d) 5
 (e) 11

PAGE 127

- 1.** $3/10, 7/10$
2. 1-3
3. 0-9
4. $10/10 > 0-1$
5. $17/10 > 0-7$
6. 1-0
7. 12
8. 7
9. (b)
10. 25
11. 90
12. 35
13. €4.65
14. 1-0
15. (a)
16. cylinder
17. 8
18. 5
19. 30
20. 9

PAGE 128

- 1.**
 (a) horizontal
 (b) vertical
 (c) diagonal
 (d) vertical
 (e) vertical
 (f) diagonal

- (g) vertical
 (h) vertical and horizontal

- 2.**
 Puzzle: Yes

PAGE 129

- 1.** All for class discussion.

- 2.**
 (a) ✓
 (b) ✓
 (c) X
 (d) ✓
 (e) X
 Puzzle
 (a) orange
 (b) black
 (c) red, green

PAGE 130

- 1.**
 (a) 1
 (b) 5
 (c) 6
 (d) 0
 (e) 2

- 2.**
 (a) ✓
 (b) X
 (c) ✓
 (d) ✓
 (e) X

- 3.**
 (a) 8
 (b) 28
 (c) 29

- 4.**
 (a) ✓
 (b) X
 (c) ✓
 (d) X
 (e) ✓

PAGE 131

- 1.**
 (a) 4, 0, 0
 (b) 1, 2, 0, 3
 (c) 2, 1, 1, 4
 (d) 2, 2, 1, 5

- 2.**
 (a) E, H, K, L, N, T
 (b) A, E, H, L, T
 (c) A, K, N
 (d) E, H, N
 (e) E, H, L, T

PAGE 132

- 1.**
 (a) 0
 (b) 0
 (c) 0
 (d) 0
 (e) 0
 (f) 0
 (g) 0
 (h) 0

- 2.**
 (a) 4
 (b) 12
 (c) 42
 (d) 56
 (e) 87
 (f) 99
 (g) 107
 (h) 264

- 3.**
 (a) 30
 (b) 70
 (c) 90
 (d) 80

- 4.**
 (a) 160
 (b) 190
 (c) 200
 (d) 240
 (e) 300
 (f) 360
 (g) 500
 (h) 570

- 5.**
 (a) 7
 (b) 0
 (c) 60
 (d) 15
 (e) 0
 (f) 35

- (g) 0
- (h) 140
- (i) 650
- (j) 86
- (k) 890
- (l) 0

- Challenge:** (a) 121
 (b) 0
 (c) 0
 (d) 217
 (e) 890
 (f) 367
 (g) 970
 (h) 496
 (i) 0

PAGE 133

- 1.**
 (a) $2 \times 6 = 6 \times 2 = 12$
 (b) $9 \times 4 = 4 \times 9 = 36$
 (c) $10 \times 5 = 5 \times 10 = 50$
 (d) $8 \times 7 = 7 \times 8 = 56$

- 2.**
 (a) $6 \times 7 = 7 \times 6 = 42$
 (b) $8 \times 9 = 9 \times 8 = 72$

- 3.**
 $6 \times 4 = 24$
 $(4 \times 4) + (2 \times 4) = 16 + 8 = 24$
 $6 \times 4 = (4 \times 4) + (2 \times 4) = 24$

- 4.**
 (a) $7 \times 3 = (5 \times 3) + (2 \times 3) = 21$
 (b) $9 \times 2 = (7 \times 2) + (2 \times 2) = 18$
 (c) $(4 \times 6) + (3 \times 6) = 7 \times 6 = 42$
 (d) $10 \times 4 = (4 \times 4) + (6 \times 4) = 40$
 (e) $9 \times 7 = (4 \times 7) + (5 \times 7) = 63$
 (f) $8 \times 6 = (1 \times 6) + (7 \times 6) = 48$

- Challenge:** $8 \times 4 = (5 \times 4) + (3 \times 4) = 32$

PAGE 134

- 1.**
 (a) 30
 (b) 18
 (c) 21
 (d) 42

- 2.**
 (a) 18
 (b) 40
 (c) 28
 (d) 56
 (e) 27
- 3.**
 (a) $(10 \times 5) + (6 \times 5) \rightarrow 50 + 30 = 80$
 (b) $(10 \times 9) + (5 \times 9) \rightarrow 90 + 45 = 135$
 (c) $(10 \times 8) + (3 \times 8) \rightarrow 80 + 24 = 104$
 (d) $(10 \times 6) + (7 \times 6) \rightarrow 60 + 42 = 102$
 (e) $(10 \times 4) + (9 \times 4) \rightarrow 40 + 36 = 76$
 (f) $(10 \times 7) + (8 \times 7) \rightarrow 70 + 56 = 126$

- Challenge:** $(10 \times 6) + (8 \times 6) \rightarrow 60 + 48 = 108$

PAGE 135

- 1.**
 (a) $30 + 50 = 80$
 (b) $24 + 60 = 84$
 (c) $27 + 90 = 117$
- 2.**
 (a) $35 + 70 = 105$
 (b) $32 + 40 = 72$
 (c) $81 + 90 = 171$
 (d) $28 + 70 = 98$
 (e) $72 + 80 = 152$
 (f) $15 + 50 = 65$
 (g) $24 + 40 = 64$
 (h) $49 + 70 = 119$
 (i) $48 + 80 = 128$
 (j) $63 + 90 = 153$

- Challenge 1:** 76

Challenge 2:

- (a) 120
- (b) 168
- (c) 96
- (d) 216
- (e) 192
- (f) 144

PAGE 136

- 1.**
 (a) 240
 (b) 300
 (c) 320
 (d) 720
 (e) 160
 (f) 90
 (g) 180
 (h) 280
- 2.**
 (a) 150
 (b) 360
 (c) 480
 (d) 420
 (e) 630
 (f) 720
 (g) 560

- 3.**
 (a) 222
 (b) 265
 (c) 594
 (d) 592
 (e) 581
- 4.**
 (a) 180
 (b) 432
 (c) 266
 (d) 208
 (e) 616
 (f) 637
 (g) 405

PAGE 137

- 1.**
 (a) 3
 (b) 1
 (c) 3 R 1
- 2.**
 (a) 3
 (b) 3
 (c) $4 \overline{)15} \begin{array}{r} 3 \\ 12 \\ \hline 3 \end{array}$ R 3
- 3.**
 (a) 18
 (b) 5
 (c) 3

- (d) $18 \div 5 = 3 \text{ R } 3$
- 4.**
 (a) $6 \overline{)19} \begin{array}{r} 3 \\ 18 \\ \hline 1 \end{array}$ R 1
 (b) $2 \overline{)14} = 5 \text{ R } 1$
 (c) $5 \overline{)27} \begin{array}{r} 5 \\ 25 \\ \hline 2 \end{array}$ R 2
 (d) $19 \div 9 = 2 \text{ R } 1$
 (e) $23 \div 7 = 3 \text{ R } 2$
 (f) $39 \div 8 = 4 \text{ R } 7$

- Challenge:** (a) 6
 (b) 1

PAGE 138

- 1.**
 (a) $3 \text{ R } 3 \rightarrow 15 \div 4 \rightarrow 3 \text{ R } 3$
 (b) $3 \text{ R } 4 \rightarrow 25 \div 7 \rightarrow 3 \text{ R } 4$
 (c) $4 \text{ R } 4 \rightarrow 28 \div 6 \rightarrow 4 \text{ R } 4$

- 2.**
 (a) 2
 (b) $3, 15 \div 6 = 2 \text{ R } 3$

- 3.**
 (a) 4
 (b) $2, 22 \div 5 = 4 \text{ R } 2$

- 4.**
 (a) 4
 (b) $2, 18 \div 4 = 4 \text{ R } 2$

- Challenge:** (a) 3
 (b) 2

PAGE 139

- 1.**
 (a) $2 \overline{)34} \begin{array}{r} 17 \\ 34 \\ \hline 0 \end{array}$
 or $2 \overline{)34} \begin{array}{r} 17 \\ 34 \\ \hline 0 \end{array}$
 (b) $3 \overline{)45} \begin{array}{r} 15 \\ 45 \\ \hline 0 \end{array}$
 or $3 \overline{)45} \begin{array}{r} 15 \\ 45 \\ \hline 0 \end{array}$
 (c) $5 \overline{)65} \begin{array}{r} 13 \\ 65 \\ \hline 0 \end{array}$
 or $5 \overline{)65} \begin{array}{r} 13 \\ 65 \\ \hline 0 \end{array}$
 (d) $8 \overline{)96} \begin{array}{r} 12 \\ 96 \\ \hline 0 \end{array}$

or
$$\begin{array}{r} 12 \\ 8 \overline{)96} \end{array}$$

(e)
$$\begin{array}{r} 7 \overline{)84} \\ 12 \end{array}$$

or
$$\begin{array}{r} 12 \\ 7 \overline{)84} \end{array}$$

(f)
$$\begin{array}{r} 4 \overline{)68} \\ 17 \end{array}$$

or
$$\begin{array}{r} 17 \\ 4 \overline{)68} \end{array}$$

(g)
$$\begin{array}{r} 6 \overline{)96} \\ 16 \end{array}$$

or
$$\begin{array}{r} 16 \\ 6 \overline{)96} \end{array}$$

PAGE 140

1.

(a)
$$\begin{array}{r} 4 \overline{)48} \\ 17 \text{ R } 0 \end{array}$$

(b)
$$\begin{array}{r} 6 \overline{)86} \\ 14 \text{ R } 2 \end{array}$$

(c)
$$\begin{array}{r} 7 \overline{)87} \\ 12 \text{ R } 3 \end{array}$$

(d)
$$\begin{array}{r} 8 \overline{)98} \\ 12 \text{ R } 2 \end{array}$$

2.

(a)
$$\begin{array}{r} 5 \overline{)75} \\ 15 \text{ R } 0 \end{array}$$

(b)
$$\begin{array}{r} 3 \overline{)54} \\ 18 \text{ R } 0 \end{array}$$

(c)
$$\begin{array}{r} 6 \overline{)80} \\ 13 \text{ R } 2 \end{array}$$

(d)
$$\begin{array}{r} 4 \overline{)83} \\ 20 \text{ R } 3 \end{array}$$

3.

(a)
$$\begin{array}{r} 3 \overline{)59} \\ 19 \text{ R } 2 \end{array}$$

(b)
$$\begin{array}{r} 7 \overline{)91} \\ 13 \text{ R } 0 \end{array}$$

(c)
$$\begin{array}{r} 8 \overline{)82} \\ 10 \text{ R } 2 \end{array}$$

(d)
$$\begin{array}{r} 6 \overline{)92} \\ 15 \text{ R } 2 \end{array}$$

4.

(a)
$$\begin{array}{r} 8 \overline{)86} \\ 10 \text{ R } 6 \end{array}$$

(b)
$$\begin{array}{r} 4 \overline{)76} \\ 19 \text{ R } 0 \end{array}$$

(c)
$$\begin{array}{r} 2 \overline{)96} \\ 43 \text{ R } 1 \end{array}$$

(d)
$$\begin{array}{r} 7 \overline{)95} \\ 13 \text{ R } 4 \end{array}$$

5.

Dancer
Guitarist
Magician
Acrobat
Juggler

6.

(a) M

(b) A

(c) G

(d) I

(e) C

PAGE 141

1. 29

2. 8

3. 7

4. 10

5. (a) 10
(b) 6

6. 7

Challenge: 19

PAGE 142

1. $44 \div 4 = 11$

2. $48 \div 4 = 12$

3. (a) $32 \div 4 = 8$
(b) $32 \div 8 = 4$

4. $18 \div 2 = 9$

5. $27 \div 3 = 9$

6. $63 \div 9 = 7$

7. $60 \div 5 = 12$

8. $(32 + 48) \rightarrow 80 \div 8 = 10$

9. $7 + 32 + 12 = 51 \div 7 = 7 \text{ R } 2$

PAGE 143

1. parallel

2. right angle

3. 42

4. 11

5. K

6. 8

7. 387

8. 180

9. 13·7

10. 2

11. 10

12. 490

13. 180

14. 4

15. 18·8

16. 1·35

17. 68·4

18. 76

19. 9

20. 8

PAGE 144

1.

(a) 275

(b) 508

(c) 6·40

(d) 7·70

(e) 9

(f) 700

(g) 0·80

(h) 890

(i) 9·01

2.

(a) 660c, €6·56, 634c, €6·19,
€6·06

(b) €9·84, 948c, €8·94, 849c,
489c

3.

(a) €3·16

(b) €2·65

(c) $50c \rightarrow €1 = 1·64$

(d) $5c \rightarrow 6·20 \rightarrow 20c \rightarrow €1$
 $€2 = 3·89$

(e) $2c \rightarrow 5·40 \rightarrow 50c$ $10c \rightarrow$
 $€2$ $€2 = 4·63$

4. 2·30

PAGE 145

1.

(a) 5·85

(b) 8·35

(c) 7·02

(d) 5·81

(e) 6·13

(f) 6·07

(i) Niall

(ii) Laura

2.

(a) 5·85, 4·15

(b) 8·35, 1·65

(c) 7·02, 2·98

(d) 5·81, 4·19

(e) 6·12, 3·88

(f) 6·07, 3·93

Challenge: €2·20

PAGE 146

1.

(a) 50c, 10c, 2c

(b) €5, €2, €1, 20c, 10c, 5c

(c) €5, €2, €2, 50c, 20c, 20c,
5c, 2c

(d) €5, €2, 50c, 10c, 5c, 2c

(e) €2, €2, 50c, 20c, 20c, 1c

(f) €5, €2, €2, 20c, 5c, 2c

2.

(a) €5·40

(b) €6·30

(c) €7·08

(d) €8·25

(e) €9·20

(f) €4·57

(g) €7·01

(h) €9·10

3. €2·30

4. €0·60

Challenge: €8·35

PAGE 147

2. caterpillar, pupa,
butterfly.

3. egg, tadpole, frog.

PAGE 148

1.

(a) 26, 15, 4.

(b) 86, 97, 88.

(c) 67, 58, 59.

(d) 46, 56, 66.

2.

(a) 8, 10, 12, 14.

(b) 24, 30, 36, 42, 48.

Add 6 to each number.

(c) 3, 9, 18, 21.

Add 3 to each number.

(d) 8, 16, 40, 56.

Add 8 to each number.

(e) 56, 49, 42.

Subtract 7 from each

number.

(f) 81, 72, 63, 54, 45.

Subtract 9 from each

number.

- (g) 260, 245, 240.
Subtract 5 from each number.
- (h) 304, 296, 292, 288
Subtract 4 from each number.

3.

(a)

6 + 4 = 10
16 + 4 = 20
26 + 4 = 30
36 + 4 = 40
46 + 4 = 50
56 + 4 = 60
66 + 4 = 70
76 + 4 = 80

(b)

8 + 7 = 15
18 + 7 = 25
28 + 7 = 35
38 + 7 = 45
48 + 7 = 55
58 + 7 = 65
68 + 7 = 75
78 + 7 = 85

(c)

23 – 10 = 13
33 – 10 = 23
43 – 10 = 33
53 – 10 = 43
63 – 10 = 53
73 – 10 = 63
83 – 10 = 73
93 – 10 = 83

(c)

7 – 5 = 2
17 – 5 = 12
27 – 5 = 22
37 – 5 = 32
47 – 5 = 42
57 – 5 = 52
67 – 5 = 62
77 – 5 = 72

Challenge: 15

PAGE 149

1.

- (a) 10, 13, 16, 19, 22.
Add 3 to each number.
- (b) 16, 32, 64.
Multiply each number by 2.
- (c) 27, 81.
Multiply each number by 3.

- (d) 12, 6, 3.
Divide each number by 2.
- (e) 449, 443, 437.
Subtract 6 from each number.
- (f) 580, 470, 360.
Subtract 110 from each number.

- (g) 530, 480, 430.
Subtract 50 from each number.

- (h) 333, 222, 111.
Subtract 11 from each number.

2.

- (a) 2, 2 ½, 3
Add ½
- (b) 2 ¼, 2 ½
Add ¼
- (c) 2 ½kg, 3kg
Add ½kg
- (d) 1 ¼m, 1 ½m
Add ¼m

3.

- (a) 740, 770
- (b) 610, 590
Subtract 5
- (c) 714, 414
Subtract 100
- (d) 784, 744, 704
Subtract 20

Challenge: 25

PAGE 150

- (a) (i) X
(ii) ✓
(iii) X
(iv) X

- (b) (i) X
(ii) X
(iii) X
(iv) ✓

- (c) (i) ✓
(ii) X
(iii) X
(iv) X

- (d) (i) X
(ii) X
(iii) ✓
(iv) X

- (e) (i) X
(ii) X
(iii) ✓
(iv) X

- (f) (i) ✓
(ii) X
(iii) X
(iv) ✓

2.

- (a) 24
(b) 11
(c) 20
(d) 76
(e) 136
(f) 55

3.

- (a) +
(b) –
(c) +
(d) ÷
(e) ÷
(f) –

4.

- (a) x, +
(b) –, +
(c) ÷, +
(d) –, x

PAGE 151

1. Friday, Thursday,
Wednesday, Tuesday,
Monday
2. November, October,
August, July, June, May,
April, March, February,
January

3.

- (b) 5
(c) 23rd
(d) 26th
(e) Thursday
(f) Monday
(g) Friday
(h) Tuesday, 12th

4. 5

5.

- (a) 31st
(b) 17th
(c) 25th
(d) 1st January
(e) 14th
(f) (d), (e), (b), (a), (c)

PAGE 152

1.

- (a) third
(b) 10:15
(c) 3:45, afternoon
(d) 10
(e) 30
(f) 50

2.

- (a) 25
(b) 35
(c) 55
(d) (i) Sleepy Village
(ii) 50 minutes

3.

- (a) 40
(b) 11:45
(c) 2:05, 2:55

4. Baking with Tammy

5. 55 minutes

6. 105 minutes

Challenge: (i) 1, 40
(ii) 100

PAGE 153

- (a) 40
(b) (i) 1, 45
(ii) 105
(c) (i) 50
(ii) 45
(d) 10
(e) (i) 35
(ii) 50
(iii) 55
(f) (i) 1, 20
(ii) 80
(g) 20
(h) 35
(i) (i) 1, 10
(ii) 70

- (j) (i) 1, 20
(ii) 80

Challenge: (i) 1, 30
(ii) 90

PAGE 154

- 1.**
(a) 40
(b) 20
(c) 8
- 2.** 60
(a) 75
(b) 90
(c) 105
(d) 120

- 3.**
(a) 70
(b) 80
(c) 75
(d) 85
(e) 100
(f) 115

- 4.**
(a) 1, 35
(b) 1, 50
(c) 2, 10
(d) 1, 6
(e) 2, 5
(f) 2, 15

- 5.**
(a) 15
(b) 25
(c) 45
(d) 40
(e) 12

- 6.**
(a) 50
(b) (i) 1, 5
(ii) 65

- 7.**
(a) (i) 60
(ii) 3
(b) (i) 12
(ii) 24

Challenge: (a) 48
(b) 120

PAGE 155

- 1.** Dancing
2. 4
3. (a) Athletics
(b) Camogie
4. 2
5. (a) 21
(b) 3
6. Sunday, 12th
7. Hill walk
8. Speech and Drama
9. Football
10. 3, 31
11. Joe's

Challenge: 16th

PAGE 156

- 1.** Class Activity
- 2.**
(a) 1,000
(b) 500
(c) 250
(d) 750
(e) 600
(f) 900
(g) 2,000
(h) 300
(i) 5,000

PAGE 157

- 1.**
(a) 250
(b) 450
(c) 1kg
(d) 200
(e) potatoes
(f) teacup
(g) 700
(h) 250 or $\frac{1}{4}$
(i) 800
- 2.** Class Activity
- 3.**
(a) kilogrammes
(b) grammes
(c) grammes
(d) kilogrammes
(e) kilogrammes

PAGE 158

- 1.**
(a) 2kg 583g
(b) 5kg 742g
(c) 3kg 241g
(d) 5kg 764g
(e) 7kg 851g
- 2.** 3, 702
- 3.** 8, 303
- 4.**
(a) 2kg 284g
(b) 4kg 254g
(c) 1kg 771g
(d) 3kg 342g
(e) 3kg 618g

Challenge: 2, 283

PAGE 159

- 1.**
(a) $500 + 500$
(b) $250 + 250 + 250 + 250$
(c) $500 + 200 + 100 + 100 + 100$
(d) $200 + 100 + 100 + 100$
(e) $200 + 50$
(f) $100 + 100 + 20 + 20 + 10$
- 2.**
(a) 8, 202
(b) 8, 924
(c) 1, 654
(d) 1
(e) 17, 126

PAGE 160

- 1.** €9.80
2. 1.60
3. 6.60
4. 36
5. 330
6. 705
7. +
8. ÷
9. 1st May
10. 2, 15
11. 1,000
12. 250
13. 5

- 14.** 9
15. 62
16. 100
17. 31
18. 7, 6
19. 94.9
20. 24

PAGE 161

- 1.**
(a) 20
(b) 48
(c) 49
- 2.**
(a) 18
(b) 11
(c) 13

- 3.**
(a) 18
(b) 30

- 4.**
(a) $6 \times 3 = 18$
(b) $7 \times 5 = 35$
(c) $4 \times 9 = 36$

PAGE 162

- 1.**
(a) $8 \times 8 = 64$
(b) 32
(c) 32
(d) 32
- 2.**
(a) 36
(c) 6
(d) 13

- 3.**
(a) 81
(c) 9
(d) 19

- 4.** $4 \times 2 = 8$

PAGE 163

- 1.**
(a) 7
(b) area

2.
 (a) Individual pupil results
 (b) Individual pupil results

4.
 (a) 40
 (b) 45

PAGE 164

1.
 (a) 32
 (b) 24
 (c) 56
 (d) 18
 (e) 15
 (f) 30

2. 50

3. 26

4. 48

PAGE 165

1. Class Activity

2.
 (a) 1,000
 (b) 500
 (c) 750
 (d) 250
 (e) 700
 (f) 800
 (g) 400
 (h) 800

Challenge: 250

PAGE 166

1.
 (a) 700
 (b) 250
 (c) 500
 (d) 900
 (e) Orange Juice
 (f) Blackcurrant
 (g) 750
 (h) 750
 (i) 200

2. Class Activity

3.
 (a) millilitres
 (b) litres
 (c) millilitres
 (d) litres

PAGE 167

1.
 (a) 3l 866ml
 (b) 5l 711ml
 (c) 4l 545ml
 (d) 6l 892ml
 (e) 7l 920ml
 2. 3l 533ml

3.
 (a) 2l 413ml
 (b) 3l 462ml
 (c) 3l 461ml
 (d) 2l 61ml
 (e) 5l 406ml

4. 2l 675ml

5. 4l 547ml

Challenge: 1l 140ml

PAGE 168

- (a) 250ml
 (b) 2l 560ml
 (c) 1l 950ml
 (d) 2l 590ml
 (e) 4l 880ml
 (f) 2l 315ml
 (g) 1l 350ml
 (h) 180ml

Challenge: 450

PAGE 169

1.
 (a) €2
 (b) €5 + €2 + €2
 (c) €5 + €2 + €1
 (d) €2
 (e) €10 + €5 + €2
 (f) €20 + €10 + €5

2.
 (a) €13
 (b) €11
 (c) €27
 (d) €15
 (e) €51
 (f) €21
 (g) €65
 (h) €12

3. €10

4. €9

5.
 (a) 7:20
 (b) $5 + 1 = 6:50$
 (c) $2 + 2 = 4:30$
 (d) $2 + 1 = 3:60$

PAGE 170

1.
 (a) €7.82
 (b) €8.37
 (c) €5.05
 (d) €9.60
 (e) €6.07
 (f) €6.33

2.
 (a) €4.53
 (b) €9.87
 (c) €7.94
 (d) €9.08
 (e) €9.10
 (f) €8.37

3. 8.63

4. 9.17

5. 8.94

6. 8.01

7. 1.39

Challenge: Sarah

PAGE 171

1.
 (a) €4.19
 (b) €4.49
 (c) €2.87
 (d) €2.89
 (e) €0.29
 (f) €2.64

2. 2.86

3. 3.88

4. 4.76

5. 1.49

6. 1.86

7. 5.49

8. 2.88

Challenge: 2.79

PAGE 172

1.
 (a) 9.73
 (b) 8.86
 (c) 7.41

2.
 (a) 8.11
 (b) 9.28
 (c) 8.49

3.
 (a) 4.86
 (b) 2.64
 (c) 3.02

4. 2.64

5. 2.12

6. 0.78

Challenge: rugby ball

PAGE 173

1. 500
 2. 600ml
 3. 10
 4. 6.25

5. 500

6. 9

7. 13

8. September

9. 105

10. 15-35

11. 1st November

12. 910

13. 71

14. 35

15. 12, 6

16. 63-7

17. 35

18. 96

19. 2, 25

20. 9

PAGE 174

1. 60

2. 144

3. 36

4. 3

5. 21

6. 96

7. triangular prism

8. 42

9. $\frac{2}{16}$ or $\frac{1}{8}$

10. 229

11. 75 or 1, 15

PAGE 175

12. hexagon

13. yes

14. parallel

15. 28

16. 19

17. 430

18. 30-1

19. 161

20. 4, 8. Pack A 2-35

21. 4

22. $\frac{1}{2}$

23. $\frac{7}{8}$

PAGE 176

1. 6

2. 230

3. 93-7

4. 57

5. 150

6. 25

7. 5

8. 54

9. (c)

10. 56

11. 0h 1t 8u $\frac{7}{10}$

12. 36

13. 70

14. 300

15. 6-30

16. 3-50

17. 4

18. 5-7

19. 58

20. August