

Page 4

- 253 419
 - 904 568
 - 748 315
253 419, 748 315, 904 568
 - $253\ 670 < 261\ 984$
 - $427\ 094 > 416\ 940$
 - $716\ 205 > 617\ 205$
 - $606\ 899 < 607\ 007$
 - $911\ 919 < 919\ 199$
 - $787\ 878 > 787\ 787$
 - $985\ 613 - 80\ 000 = 905\ 613$
 - $410\ 763 - 700 = 410\ 063$
 - $826\ 495 - 800\ 000 = 26\ 495$
 - $745\ 522 - 5000 = 740\ 522$
 - $601\ 304 - 600\ 000 = 1304$
 - $520\ 482 - 80 = 520\ 402$
- Think. 512 346

Page 5

- $562\ 045 > 503\ 452$
 - $452\ 604 > 425\ 640$ and two numbers between
 - $301\ 234 < 310\ 432$ and two numbers between
 - $824\ 215 < 824\ 511$ and two numbers between
 - $703\ 462 < 730\ 462$ and two numbers between
 - $555\ 555 - 50\ 005 = 505\ 550$
 - $555\ 555 - 5500 = 550\ 055$
 - $555\ 555 - 50\ 505 = 505\ 050$
 - $555\ 555 - 5050 = 550\ 505$
- Think. 600 001

Page 6

- $6345 \div 10 = 634.5$,
 $6345 \div 100 = 63.45$,
 $6345 \div 1000 = 6.345$
 - $73\ 652 \div 10 = 7365.2$,
 $73\ 652 \div 100 = 736.52$,
 $73\ 652 \div 1000 = 73.652$
 - $30\ 060 \div 10 = 3006$,
 $30\ 060 \div 100 = 300.6$,
 $30\ 060 \div 1000 = 30.06$
 - $36.24 \times 10 = 362.4$,
 $36.24 \times 100 = 3624$,
 $36.24 \times 1000 = 36\ 240$
 - $188.4 \times 10 = 1884$,
 $188.4 \times 100 = 18\ 840$,
 $188.4 \times 1000 = 188\ 400$
 - $1.572 \times 10 = 15.72$,
 $1.572 \times 100 = 157.2$,
 $1.572 \times 1000 = 1572$
- Think. 3

Page 7

- $43.06 \times 100 = 4306$
 - $7242.1 \times 100 = 724\ 210$
 - $846\ 250 \div 100 = 8462.5$
 - $34.62 \times 1000 = 34\ 620$
 - $78\ 846 \div 100 = 788.46$
 - $354.13 \times 10 = 3541.3$
 - $71\ 700 \div 1000 = 71.7$
 - $64.6 \times 1000 = 64\ 600$
 - $5390 \div 1000 = 5.39$
 - $400.06 \times 100 = 40\ 006$
- Think. For example 1060, 1960, 60

Page 8

- $5.624 > 5.523$
 - $4.174 < 4.721$
 - $6.143 > 6.056$
 - $0.468 < 0.621$
 - $4.253, 4.352, 4.523, 5.324,$
 $5.342, 5.423$
- Think. Any three from the following, in ascending order:
2.134, 2.143, 2.314, 2.341, 2.413, 2.431

Page 9

- $b = 0.5, 1$
- $c = 1.4, 1$
- $d = 1.8, 2$
- $a = 15.3, 15$
- $b = 15.8, 16$
- $c = 16.2, 16$
- $d = 16.6, 17$
- $b = 3.42, 3.4$
- $c = 3.67, 3.7$
- $d = 3.89, 3.9$
- $a = 24.13, 24.1$
- $b = 24.39, 24.4$
- $c = 24.61, 24.6$
- $d = 24.84, 24.8$

Think. 0.51 and any two of the following: 0.45, 0.46, 0.47, 0.48, 0.49, 0.52, 0.53, 0.54

Page 10

- 18.15, 18.2, 18
 - 18.79, 18.8, 19
 - 19.13, 19.1, 19
 - 19.39, 19.4, 19
 - 19.86, 19.9, 20
- Number line with numbers correctly placed
- Number line with numbers correctly placed

Think. 3 3-place decimals between 0.495 and 0.549 inclusive.

Page 11

- 46.19, 46.2, 46
 - 46.86, 46.9, 47
 - 47.14, 47.1, 47
 - 47.43, 47.4, 47
 - 47.77, 47.8, 48
- 6.93, 6.9, 7
 - 6.97, 7 or 7.0, 7
 - 7.01, 7 or 7.0, 7
 - 7.07, 7.1, 7
- Numbers marked on number line.

Think. 10, if including 0.550, i.e. 0.545 up to 0.554

Page 12

- $\frac{1}{10} = 0.1$
- $0.6 = \frac{6}{10}$
- $\frac{7}{10} = 0.7$
- $0.9 = \frac{9}{10}$
- $\frac{27}{100} = 0.27$
- $0.31 = \frac{31}{100}$
- $\frac{63}{100} = 0.63$
- $0.19 = \frac{19}{100}$
- $\frac{1}{4} = 0.25$
- $0.01 = \frac{1}{100}$
- $\frac{3}{100} = 0.03$
- $0.07 = \frac{7}{100}$
- $0.75 = \frac{75}{100} = \frac{3}{4}$
- $0.05 = \frac{5}{100} = \frac{1}{20}$
- $0.24 = \frac{24}{100} = \frac{6}{25}$
- $0.96 = \frac{96}{100} = \frac{24}{25}$

Think. Answers will vary, e.g. $0.07 = \frac{7}{100}$

Page 13

- $\frac{53}{100} = 0.53$
- $0.75 = \frac{3}{4}$
- $0.23 = \frac{23}{100}$
- $\frac{91}{100} = 0.91$
- $0.7 = \frac{7}{10}$
- $\frac{1}{4} = 0.25$
- $\frac{3}{10} = 0.3$
- $0.09 = \frac{9}{100}$
- $\frac{456}{1000} = 0.456$
- $0.801 = \frac{801}{1000}$
- $\frac{195}{1000} = 0.195$
- $0.327 = \frac{327}{1000}$
- $0.363 = \frac{363}{1000}$
- $\frac{125}{1000} = 0.125$

15. $\frac{43}{1000} = 0.043$

16. $0.009 = \frac{9}{1000}$

Think. Answers will vary,

e.g. $0.007 = \frac{7}{1000}$

Page 14

1. 302 041 + 80 000 = 382 041
2. 162 395 + 300 200 = 462 595
3. 972 816 + 3023 = 975 839
4. 375 562 + 20 030 = 395 592
5. 634 436 + 2002 = 636 438
6. 743 061 + 106 000 = 849 061
7. 382 + 499 = 881
8. 7095 + 801 = 7896
9. 463 + 399 = 862
10. 4184 + 601 = 4785
11. 3072 + 702 = 3774
12. 4173 + 798 = 4971
13. 76 + 59 = 135
14. 82 + 63 = 145
15. 326 + 84 = 410
16. 657 + 65 = 722
17. 37 + 52 + 48 = 137
18. 81 + 76 + 23 = 180
19. 80 + 30 + 60 + 90 = 260
20. 700 + 500 + 600 = 1800
21. 15 000 + 43 000 = 58 000
22. 900 + 3000 + 2000 + 8000 = 22 000

Think. Answers will vary but may include reference to number bonds and place value.

Page 15

1. 102 041 + 80 204 = 182 245
2. 6085 + 903 = 6988
3. 70 + 40 + 50 + 90 = 250
4. 406 301 + 310 400 = 716 701
5. 836 + 84 = 920
6. 1276 + 699 = 1975
7. 77 + 69 = 146
8. 686 784 + 3006 = 689 790
9. 700 + 900 + 800 = 2400
10. 3766 + 59 = 3825
11. 382 + 697 = 1079
12. 305 562 + 20 099 = 325 661
13. 13 072 + 906 = 13 978
14. 85 000 + 42 000 = 127 000
15. 84 + 73 + 63 = 220
16. 634 436 + 102 142 = 736 578
17. 7268 + 598 = 7866
18. 47 + 71 + 59 = 177
19. 683 069 + 104 300 = 787 369

20. 5000 + 13 000 + 7000 = 25 000

21. 847 + 74 = 921

22. 4604 + 603 = 5207

Think. Answers will vary.

Page 16

All questions should be answered using column addition.

1. 51 686
2. 108 341
3. 68 264
4. 69 941
5. 103 297
6. 16 897
7. 5829
8. 16 218
9. 14 692
10. 18 914

Think. 14 443

Page 17

Think. Two of Q5-8, Q12.

1. 73 137
2. 82 190
3. 96 231
4. 81 211
5. 136 822
6. 120 529
7. 104 004
8. 139 001
9. 92 224
10. 29 883
11. 38 101
12. 113 191

Page 18

1. 32 + 68 = 100
2. 69 + 31 = 100
3. 77 + 23 = 100
4. 56 + 44 = 100
5. 61 + 39 = 100
6. 8.42 + 0.58 = 9
7. 5.81 + 0.19 = 6
8. 3.37 + 0.63 = 4
9. 6.29 + 0.71 = 7
10. 4.14 + 0.86 = 5
11. 7.76 + 0.24 = 8

Think. Answers will vary.

Page 19

1. 7.5 cm
2. 9.62 g
3. 14.14, 9.49, 15.72, 8.75, 11.67
Surfer 3 got the highest score.

Think. Answers will vary.

Page 20

Questions 1–8 should be answered using column addition.

1. 12.68
2. 10.14
3. 5.63
4. 8.46
5. 13.78
6. 10.83
7. 16.17
8. 6.62
9. £9.46
10. £8.58
11. £7.93
12. £3.28

Think. Answers will vary.

Page 21

1. 6.87
2. 10.88
3. 13.96
4. 20.19
5. 9.04
6. 21.47
7. £9.03
8. £10.40
9. £12.15
10. £10.22

Think. Answers will vary.

Page 22

1. 3.5 + 2.7 = 6.2
2. 10.24 + 4.1 = 14.34
3. 5.32 + 1.84 = 7.16
4. 5.22 + 1.45 = 6.67
5. 5.71 + 8.83 = 14.54
6. 8.52 + 9.4 = 17.92

Questions 7–10 should be answered using column addition.

7. 42.39
8. 46.81
9. 80.90
10. 81.45

Think. Answers will vary.

Page 23

1. $3 \cdot 71 + 8 \cdot 29 = 12$
2. $14 \cdot 05 + 7 \cdot 3 = 21 \cdot 35$
3. $63 \cdot 77 + 24 \cdot 86 = 88 \cdot 63$
4. $54 \cdot 2 + 6 \cdot 9 = 61 \cdot 1$
5. $12 \cdot 99 + 5 \cdot 4 = 18 \cdot 39$
6. $34 \cdot 71 + 18 \cdot 47 = 53 \cdot 18$
7. $3 \cdot 69 + 6 \cdot 2 = 9 \cdot 89$
8. $66 \cdot 3 + 24 \cdot 85 = 91 \cdot 15$
9. $3 \cdot 99 + 7 \cdot 3 = 11 \cdot 29$
10. $58 \cdot 25 + 19 \cdot 78 = 78 \cdot 03$
11. $22 \cdot 6 + 31 \cdot 16 = 53 \cdot 76$
12. $7 \cdot 45 + 6 \cdot 55 = 14$

Think. Answers will vary, for example $\pounds 6 \cdot 63 + \pounds 40 \cdot 01 = \pounds 46 \cdot 64$

Page 24

1. $23 \cdot 81 + 4 \cdot 65 = 28 \cdot 46$
2. $19 \cdot 07 + 3 \cdot 2 = 22 \cdot 27$
3. $47 \cdot 85 + 95 = 142 \cdot 85$
4. $16 \cdot 8 + 2 \cdot 99 = 19 \cdot 79$
5. $48 \cdot 44 + 3 \cdot 87 = 52 \cdot 31$
6. $5 \cdot 04 + 0 \cdot 73 = 5 \cdot 77$
7. $73 \cdot 36 + 1 \cdot 64 = 75$
8. $4 \cdot 82 + 1 \cdot 28 = 6 \cdot 1$
9. $13 \cdot 99 + 2 \cdot 7 = 16 \cdot 69$
10. $63 \cdot 72 + 4 \cdot 57 = 68 \cdot 29$
11. $53 \cdot 01 + 5 \cdot 81 = 58 \cdot 82$
12. $77 \cdot 74 + 6 \cdot 69 = 84 \cdot 43$

Think. Answers will vary, e.g. $\pounds 31 \cdot 04 + \pounds 13 \cdot 96$, $\pounds 31 \cdot 08 + \pounds 13 \cdot 92$, $\pounds 22 \cdot 04 + \pounds 22 \cdot 96$, $\pounds 40 \cdot 04 + \pounds 4 \cdot 96$, ... etc.

Page 25

1. $a = 28$
2. $b = 3$
3. $c = 1 \frac{1}{2}$
4. $d = 4$
5. $e = 4$
6. $f = 10$
7. $g = 4$
8. $h = 25$
9. $i = 96$
10. $j = 70$

Think. $a = 4$, $b = 5$

Page 26

1. $a = 3$
2. $b = 5$
3. $y = 35$
4. $x = 8$
5. $c = 10$

6. $a = 5$
 7. $x = 16$
 8. $c = 3$
 9. $b = 9$
 10. $y = 15$
 11. any answers where $a + b = 10$
 12. any answers where $c + d = 7$
 13. any answers where $m + n = 8$
 14. any answers where $g \times h = 10$
- Think. Answers will vary.

Page 27

1. $c = 6$, $d = 4$
 2. $a = 4$, $b = 3$
 3. $x = 6$, $y = 1$
 4. g and h are 11 and 1 or 1 and 11
 5. $c = 2$, $d = 10$
 6. m and n are 3 and 2 or 2 and 3
 7. x and y are 2 and 6 or 6 and 2
- Think. Answers include: $c = 2$ when $d = 7$, $c = 3$ when $d = 4$, $c = 4$ when $d = 3$, $c = 7$ when $d = 2$.

Page 28

1. $x^\circ = 30^\circ$
2. $y^\circ = 35^\circ$
3. $x^\circ = 110^\circ$
4. $y^\circ = 60^\circ$
5. $a^\circ = 80^\circ$
6. $b^\circ = 70^\circ$
7. $c^\circ = 105^\circ$
8. $b = 4$ cm
9. $a = 5$ cm

Page 29

1. 52, 52, 20
 2. 8, 8, 2
 3. 72, 72, 52
 4. 6, 6, 16
 5. Answers will vary.
 6. Answers will vary.
- Think. The answers are the same. Yes, it works for other numbers.

Page 30

1. $(2 + 5) \times 3 = 21$, $2 + (5 \times 3) = 17$
2. $(42 - 5) \times 7 = 259$, $42 - (5 \times 7) = 7$
3. $(12 \div 6) - 2 = 0$, $12 \div (6 - 2) = 3$
4. $4 + 5 \times 3 = 19$, $(4 + 5) \times 3 = 27$
5. $10 + 6 \div 2 = 13$, $10 + (6 \div 2) = 13$
6. $(3 + \frac{1}{2}) \times 2 = 7$, $3 + (\frac{1}{2} \times 2) = 4$
7. $4 \times 6 - 2 = 22$, $4 \times (6 - 2) = 16$

8. $24 - (4 \times 3) = 12$, $(24 - 4) \times 3 = 60$
 9. $5 - 1 \frac{1}{2} \times 2 = 2$, $(5 - 1 \frac{1}{2}) \times 2 = 7$
 10. $(3 \times 2) + (6 \div 2) = 9$, $3 \times (2 + 6) \div 2 = 12$
- Think. Answers will vary.

Page 31

1. $6 + 2 \times 4 = 14$
 2. $(3 + 9) \div 3 = 4$
 3. $10 - 3 \times 2 = 4$
 4. $(9 - 3) \times 2 = 12$
 5. $7 \times 3 + 2 = 23$
 6. $(12 - 10) \div 2 = 1$
 7. $80 \div 10 - 6 = 2$
 8. $33 \div (4 + 7) = 3$
 9. $(24 + 4) \div 4 = 7$
 10. $12 \div 2 + 4 \times 3 = 18$
 11. $12 \div (2 + 4) \times 3 = 6$
 12. $(14 - 7) \times 7 + 4 = 53$
 13. 55 cm
 14. 154 pouches
 15. 240 cards
 16. 84 km
- Think. $12 + 4 \times 5 = 32$, $(12 + 4) \times 5 = 80$, $12 \times 4 + 5 = 53$, $12 \times (4 + 5) = 108$, $(12 + 5) \times 4 = 68$, $12 \times 5 + 4 = 64$.

Page 32

1. $10 + 2 \times 9 = 28$
 2. $3 + 9 \div 3 - 1 = 5$
 3. $5 + (10 - 3) \times 5 = 40$
 4. $(32 - 12) \div 2 + 8 = 18$
 5. $27 \div (3 + 6) = 3$
 6. $6 + (22 - 10) \div 4 = 9$
 7. $(170 - 50) \div 10 = 12$
 8. $16 + (4 + 7) \times 3 = 49$
 9. $(72 - 8) \div 8 = 8$
 10. $54 \div 6 + 3 \times 12 = 45$
 11. $54 \div (6 + 3) \times 12 = 72$
 12. $(14 + 7) \times 10 \div (7 - 4) = 70$
 13. 378
 14. 24 850
 15. 9
 16. 14
- Think. Answers will vary.

Page 33

1. 0.705 kg
2. 1.704 kg
3. 1.9 kg
4. 0.812 kg
5. 0.046 kg

6. 1.704 kg
7. 1.01 kg
8. 0.07 kg
9. 4.2 kg, 4.7 kg
10. 2.6 kg
11. 1.05 kg

Think. Answers will vary. A reasonable estimate for the weight of a cat is 5 kg, for a person 70 kg, for an elephant 5000 kg. So about 14 cats weigh the same as a person. About 70 people weigh the same as an elephant.

Page 34

1. 3104 g
 2. 1002 g
 3. 4050 g
 4. 6009 g
 5. 850 g
 6. 4270 g
 7. 120 g
 8. 1770 g
 9. 45 kg = 0.045 tonnes
 10. 56 kg = 0.056 tonnes
 11. 4.6 tonnes = 4600 kg
 12. 100 g = 0.1 kg
 13. 530 g = 0.53 kg
 14. 7367 g = 7.367 kg
 15. 54 600 kg = 54.6 tonnes
 16. 10 tonnes = 10 000 000 g
- Think. Answers will vary.

Page 35

1. 48 cm, 480 mm
2. 66 cm, 660 mm
3. 74 cm, 740 mm
4. 126 cm, 1260 mm
5. 133 cm, 1330 mm
6. 66 cm, 660 mm
7. 107 cm, 1070 mm
8. 104 cm, 1040 mm
9. 5
10. 20
11. 8
12. 4
13. 40
14. 2
15. 16

Think. Answers will vary but should be around 750.

Page 36

- Rory: 28 minutes, 2nd
 Sharon: 38 minutes, 3rd
 Eliza: 27 minutes, 1st
 Dev: 1 hour 15 minutes, 7th
 Harrison: 49 minutes, 5th
 Priya: 1 hour 35 minutes, 8th
 Precious: 55 minutes, 6th
 Jack: 41 minutes, 4th
 Think. 12:47 and 13:10

Page 37

- Allie: 2 hours 25 minutes, 1st
 Tom: 3 hours 35 minutes, 4th
 Dave: 3 hours 46 minutes, 6th
 Shifa: 4 hours 56 minutes, 8th
 Alfie: 2 hours 55 minutes, 3rd
 Nelson: 3 hours 53 minutes, 7th
 Adaya: 3 hours 42 minutes, 5th
 Emile: 2 hours 33 minutes, 2nd
 Think. 15:15 or 16:15

Page 38

- Sam: 3 hours 54 minutes, 4th
 Oliver: 4 hours 15 minutes, 7th
 Isla: 15:09, 6th
 Craig: 15:21, 3rd
 Millan: 14:13, 1st
 Daniel: 5 hours 11 minutes, 8th
 Tami: 13:38, 2nd
 Keira: 12:55, 5th
 Think. 4:03 and 59.8 seconds

Page 39

1. 5813, 3294, 5127
2. 2857, 338, 2171
3. 6904, 4385, 6218
4. 7078, 4559, 6392
- 5–7. Answers will vary
8. Children check using addition
 Think. Answers will vary, e.g. 376, 476, 876 etc.

Page 40

- Questions should be answered using column subtraction.
1. 52 081
 2. 76 722
 3. 22 505
 4. 10 667
 5. 21 181
 6. 21 621
 7. 1192

8. 12 299
9. 36 509
10. 30 511
11. 142 962
12. 82 144

Think. Answers will vary.

Page 41

Questions should be answered using column subtraction.

1. 60 715
2. 53 642
3. 20 766
4. 50 742
5. 13 816
6. 7404
7. 45 799
8. 6683
9. 44 152
10. 403 511
11. 108 214
12. 208 695

Think. Answers will vary.

Page 42

1. $8.3 - 4.1 = 4.2$
 2. $14.8 - 3.2 = 11.6$
 3. $6.42 - 1.01 = 5.41$
 4. $26.38 - 10.2 = 16.18$
 5. $8.4 - 7.7 = 0.7$
 6. $14.3 - 11.8 = 2.5$
 7. $6.2 - 3.9 = 2.3$
 8. $11.1 - 6.3 = 4.8$
 9. $4.6 - 1.99 = 2.61$
 10. $7.3 - 2.01 = 5.29$
 11. $6.25 - 3.99 = 2.26$
 12. $20.6 - 11.01 = 9.59$
- Think. Subtract 2, then add on 0.1.

Page 43

1. $13.36 - 5.99 = 7.37$
2. $41.37 - 20.04 = 21.33$
3. $3.82 - 0.3 = 3.52$
4. $12.3 - 9.7 = 2.6$
5. $54.72 - 8.99 = 45.73$
6. $3.4 - 2.8 = 0.6$
7. $18.27 - 3.99 = 14.28$
8. $14.89 - 1.03 = 13.86$
9. $13.2 - 9.6 = 3.6$
10. $58.39 - 16.04 = 42.35$
11. $40.13 - 7.99 = 32.14$
12. $22.3 - 18.8 = 3.5$
13. $11.27 - 4.99 = 6.28$

14. $85 \cdot 66 - 30 \cdot 3 = 55 \cdot 36$
 15. $64 \cdot 4 - 58 \cdot 8 = 5 \cdot 6$
 Think. Answers will vary.

Page 44

- $2 \cdot 37 - 1 \cdot 82 = 0 \cdot 55$
- $6 \cdot 14 - 5 \cdot 67 = 0 \cdot 47$
- $3 \cdot 2 - 1 \cdot 78 = 1 \cdot 42$
- $8 \cdot 21 - 7 \cdot 69 = 0 \cdot 52$
- $7 \cdot 09 - 6 \cdot 73 = 0 \cdot 36$
- $4 \cdot 1 - 3 \cdot 65 = 0 \cdot 45$
- $5 \cdot 3 - 4 \cdot 72 = 0 \cdot 58$
- $9 \cdot 17 - 8 \cdot 81 = 0 \cdot 36$
- $6 \cdot 04 - 5 \cdot 66 = 0 \cdot 38$
- $10 \cdot 26 - 9 \cdot 83 = 0 \cdot 43$

Think. Three times

Page 45

- $8 \cdot 7 - 7 \cdot 63 = 1 \cdot 07$
- $7 \cdot 2 - 6 \cdot 78 = 0 \cdot 42$
- $8 \cdot 4 - 6 \cdot 29 = 2 \cdot 11$
- $5 \cdot 9 - 3 \cdot 63 = 2 \cdot 27$
- $6 \cdot 4 - 3 \cdot 96 = 2 \cdot 44$
- $5 \cdot 3 - 4 \cdot 72 = 0 \cdot 58$
- $9 \cdot 1 - 5 \cdot 09 = 4 \cdot 01$
- $6 \cdot 4 - 5 \cdot 27 = 1 \cdot 13$
- $8 \cdot 5 - 3 \cdot 66 = 4 \cdot 84$
- $6 \cdot 7 - 2 \cdot 66 = 4 \cdot 04$
- $6 \cdot 44 - 2 \cdot 93 = 3 \cdot 51$
- $9 \cdot 25 - 2 \cdot 84 = 6 \cdot 41$
- $7 \cdot 33 - 5 \cdot 76 = 1 \cdot 57$
- $8 \cdot 27 - 2 \cdot 67 = 5 \cdot 6$
- $11 \cdot 54 - 2 \cdot 86 = 8 \cdot 68$
- $12 \cdot 36 - 10 \cdot 74 = 1 \cdot 62$

Think. Answers will vary. For example, $2 \cdot 28 - 1 \cdot 78 = 0 \cdot 5$ and $2 \cdot 38 - 1 \cdot 78 = 0 \cdot 6$ or $2 \cdot 68 - 1 \cdot 78 = 0 \cdot 9$ and $2 \cdot 78 - 1 \cdot 78 = 1$

Page 46

- $£20 - £17 \cdot 48 = £2 \cdot 52$
- $£50 - £34 \cdot 28 = £15 \cdot 72$
- $£100 - £76 \cdot 80 = £23 \cdot 20$
- $£100 - £85 \cdot 93 = £14 \cdot 07$
- $£17 \cdot 21$
- $£33 \cdot 63$
- $£56 \cdot 36$

Think. £26 and £13

Page 47

- £13·15
- £20·95
- £29·70

- £15·65
 - £11·65
 - £35·89
 - £5·27
 - £66·47
- Think. Yes.

Page 48

- £7·66
 - £8·52
 - £10·48
 - £33·48
 - £45·85
 - Leslie has £52·42 and Keith has £40·93, so Leslie has £11·49 more
 - £2·07
 - £15·16
 - £16·13
 - £9·12
- Think. Yes.

Page 49

First ten multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

First ten multiples of 12: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120

First ten multiples of 24: 24, 48, 72, 96, 120, 144, 168, 192, 216, 240

- $3 \times 24 = 72$
- $7 \times 24 = 168$
- $9 \times 24 = 216$
- $6 \times 24 = 144$
- $8 \times 24 = 192$
- $4 \times 24 = 96$
- $3 \times 13 = 39$
- $12 \times 16 = 192$
- $5 \times 13 = 65$
- $3 \times 15 = 45$
- $7 \times 13 = 91$
- $21 \times 16 = 336$
- $11 \times 13 = 143$
- $5 \times 15 = 75$
- $11 \times 16 = 176$
- $17 \times 15 = 255$
- $17 \times 13 = 221$
- $17 \times 17 = 289$
- $13 \times 13 = 169$
- $6 \times 15 = 90$
- $16 \times 25 = 400$
- $24 \times 13 = 312$
- $18 \times 13 = 234$
- $13 \times 15 = 195$
- $31 \times 13 = 403$

26. $11 \times 15 = 165$
 Think. Answers will vary.

Page 50

Predictions will vary.

- $3679 \times 4 = 14\ 716$
- $2531 \times 4 = 10\ 124$
- $1748 \times 6 = 10\ 488$
- $1435 \times 8 = 11\ 480$
- $1897 \times 5 = 9485$
- $1362 \times 7 = 9534$
- $2638 \times 4 = 10\ 552$
- $1234 \times 8 = 9872$

Nearest to 10 000: Naima, Tom, Davinder, Chuy, Kerry, Gordon, Abigail, Sameer, Caitlin

- 1568
- 3428
- 5976
- 5728

Think. Answers will vary.

Page 51

- £34·74
- £14·72
- £13·71
- £16·14
- £9·65
- £11·52
- £2·72
- £6·55
- £4

Page 52

- £84·52
£51·69
£93·05
£44·61
£269·55
£159·36
- £12·65
- £63·63
- The box of 18 is 8p cheaper.
- £4·98

Page 53

- £136·74
£265·16
£148·88
£104·09
£447·66
£462·88

2. £82.11
3. £25.30
4. £11.54
5. £1.99

Think. $£43.60 \times 5 = £218$,
 $£34.50 \times 6 = £207$

Page 54

1. $324 \times 14 = 4536$
2. $513 \times 12 = 6156$
3. $625 \times 13 = 8125$
4. $242 \times 14 = 3388$
5. $146 \times 12 = 1752$
6. $453 \times 13 = 5889$

Think. 4

Page 55

Estimates should be given first.

1. $573 \times 15 = 8595$
2. $246 \times 14 = 3444$
3. $437 \times 18 = 7866$
4. $825 \times 19 = 15\,675$
5. $1546 \times 13 = 20\,098$
6. $7846 \times 16 = 125\,536$
7. $5206 \times 12 = 62\,472$
8. $8564 \times 17 = 145\,588$

Think. Yes, $345 \times 16 = 5520$,
 $346 \times 15 = 5190$.

Page 56

Estimates should be given first.

1. $2445 \times 16 = 39\,120$
2. $5738 \times 17 = 97\,546$
3. $7957 \times 14 = 111\,398$
4. $1745 \times 19 = 33\,155$
5. $9753 \times 18 = 175\,554$
6. $7685 \times 16 = 122\,960$
7. $2854 \times 13 = 37\,102$
8. $6875 \times 17 = 116\,875$
9. $4175 \times 18 = 75\,150$

Think. $24 \times 365 = 8760$ hours

Page 57

1. Three from:

- $212 \times 13 = 2756$, $536 \times 13 = 6968$,
 $871 \times 13 = 11\,323$, $635 \times 13 = 8255$
 $212 \times 14 = 2968$, $536 \times 14 = 7504$,
 $871 \times 14 = 12\,194$, $635 \times 14 = 8890$
 $212 \times 16 = 3392$, $536 \times 16 = 8576$,
 $871 \times 16 = 13\,936$, $635 \times 16 = 10\,160$
 $212 \times 18 = 3816$, $536 \times 18 = 9648$,
 $871 \times 18 = 15\,678$, $635 \times 18 = 11\,430$

2. Three from:

- $117 \times 12 = 1404$, $698 \times 12 = 8376$,

- $451 \times 12 = 5412$, $377 \times 12 = 4524$
 $117 \times 13 = 1521$, $698 \times 13 = 9074$,
 $451 \times 13 = 5863$, $377 \times 13 = 4901$
 $117 \times 14 = 1638$, $698 \times 14 = 9772$,
 $451 \times 14 = 6314$, $377 \times 14 = 5278$
 $117 \times 15 = 1755$, $698 \times 15 = 10\,470$,
 $451 \times 15 = 6765$, $377 \times 15 = 5655$
 Think. 6 (362×16)

Page 58

Estimates should be given first

1. $6537 \times 12 = 78\,444$
2. $2679 \times 24 = 64\,296$
3. $3531 \times 24 = 84\,744$
4. $1748 \times 39 = 68\,172$
5. $2035 \times 18 = 36\,630$
6. $3897 \times 17 = 66\,249$

Chuy is closest to 70 000.

Think. 6 (667×16)

Page 59

1. 7°C
2. 6°C
3. 11°C
4. 4°C
5. 13°C
6. 9°C
7. -12 , -3.8 , 5.7
8. -9 , -6.3 , 2.1
9. -6.4 , -1.8 , 7
10. -1 , -0.7 , 0.8
11. -16 , -9.9 , 3.4
12. -8 , -7.8 , 7.9
13. -5°C
14. 11°C

Think. Answers will vary but one number should be positive and the other negative. They must have a difference of 5.

Page 60

1. 7°C
2. 21°C
3. 21°C
4. 15°C
5. 25°C
6. 19°C
7. -7.26 , -4.82 , 3.25 , 5.12
8. -9.32 , -5.76 , -3.62 , 10.44
9. -6.71 , -1.76 , 6.71 , 7.16
10. -2.22 , -2 , 2.02 , 2.20
11. -5.55 , -5.5 , 5.5 , 5.55
12. -8.88 , -8.11 , 8.01 , 8.81
13. -4°C

14. -10°C

Think. Answers will vary, e.g. 7 and -3 .

Page 61

1. 8°C
2. February
3. 12°C
4. May
5. 28°C
6. June

Page 62

1. 105°C
2. chlorine
3. tin
4. 8°C
5. sodium and potassium
6. nitrogen and chlorine
7. sodium and chlorine
8. sodium and mercury
9. £44.30
10. £32.05

Think. -5 and -7

Page 63

1. $\frac{3}{8} > \frac{1}{4}$
2. $\frac{7}{12} < \frac{3}{4}$
3. $\frac{5}{6} > \frac{2}{3}$
4. $\frac{3}{4} > \frac{5}{8}$
5. $\frac{1}{3} < \frac{4}{9}$
6. $\frac{1}{2} < \frac{3}{5}$
7. $\frac{4}{5} > \frac{9}{10}$
8. $\frac{5}{9} < \frac{2}{3}$
9. $\frac{3}{10} < \frac{2}{5}$
10. $\frac{7}{8} > \frac{3}{4}$
11. $\frac{7}{10} > \frac{67}{100}$
12. $\frac{5}{6} < \frac{11}{12}$
13. $\frac{8}{10} > \frac{71}{100}$
14. $\frac{39}{100} < \frac{4}{10}$
15. $\frac{9}{10} < \frac{19}{20}$

Think. Answers will vary but will be equivalent to $\frac{2}{5}$, e.g. $\frac{4}{10}$, $\frac{40}{100}$ etc.

Page 64

1. $\frac{3}{4} > \frac{6}{12}$
2. $\frac{3}{16} < \frac{1}{4}$
3. $\frac{4}{5} > \frac{7}{10}$
4. $\frac{2}{5} < \frac{9}{20}$
5. $\frac{7}{8} < \frac{23}{24}$
6. $\frac{5}{7} < \frac{11}{14}$
7. $\frac{5}{9} < \frac{2}{3}$
8. $\frac{52}{100} < \frac{6}{10}$

9. $\frac{6}{10} > \frac{2}{5}$
10. $\frac{37}{100} < \frac{2}{5}$
11. $\frac{19}{100} < \frac{2}{10}$
12. $\frac{4}{5} < \frac{88}{100}$
13. $\frac{3}{10} > \frac{1}{20}$
14. $\frac{2}{3} > \frac{3}{5}$
15. $\frac{3}{4} < \frac{5}{6}$
16. $\frac{4}{5} > \frac{3}{4}$

Think. Answers will vary, e.g. $\frac{1}{2}$ and $\frac{3}{8}$.

Page 65

1. $\frac{1}{2} < \frac{5}{8}$
2. $\frac{1}{4} < \frac{3}{8}$
3. $\frac{1}{2} > \frac{3}{8}$
4. $\frac{1}{3} > \frac{2}{9}$
5. $\frac{5}{6} > \frac{2}{3}$
6. $\frac{7}{9} > \frac{2}{3}$
7. $\frac{3}{10} < \frac{1}{2}$
8. $\frac{3}{5} < \frac{7}{10}$
9. $\frac{7}{10} > \frac{1}{2}$

Think. Answers will vary.

Page 66

Answers will vary.

Page 67

1. $\frac{5}{6} + \frac{5}{6} = 1\frac{2}{3}$
2. $\frac{5}{9} + \frac{7}{9} = 1\frac{1}{3}$
3. $\frac{5}{8} + \frac{7}{8} = 1\frac{1}{2}$
4. $\frac{3}{10} + \frac{9}{10} = 1\frac{1}{5}$
5. $\frac{7}{12} + \frac{11}{12} = 1\frac{1}{2}$
6. $\frac{7}{9} + \frac{5}{9} + \frac{7}{9} = 2\frac{1}{9}$
7. $\frac{3}{8} + \frac{5}{8} + \frac{7}{8} = 1\frac{7}{8}$
8. $\frac{5}{12} + \frac{11}{12} + \frac{7}{12} = 1\frac{11}{12}$
9. $\frac{7}{15} + \frac{11}{15} + \frac{2}{15} = 1\frac{1}{3}$
10. $\frac{5}{10} + \frac{3}{10} + \frac{9}{10} = 1\frac{7}{10}$

Think. If one or more of the fractions was top-heavy/improper it would be possible, e.g. $\frac{6}{4} + \frac{3}{4}$.

Page 68

1. 32 m², 24 m
2. 36 m², 28 m
3. 30 m², 26 m
4. 45 m², 28 m
5. 36 m², 24 m
6. 24 m², 28 m

Think. No.

Page 69

1. 48 cm², 32 cm
2. 32 cm², 26 cm
3. 52 cm², 32 cm
4. 155 cm², 56 cm
5. 80 cm², 48 cm
6. 64 cm², 40 cm

Think. There are a range of possible answers, e.g. an L-shape with sides (starting on the left and working anti-clockwise) 8 cm, 3 cm, 6 cm, 1 cm, 2 cm and 2 cm or one with sides 6 cm, 9 cm, 2 cm, 8 cm, 4 cm, 1 cm.

Page 70

1. 30 m³
2. 90 m³
3. 60 m³
4. 9 m³
5. 60 m³

Think. Answers will vary but should have a product of 6, e.g. 1 × 6, 2 × 3.

Page 71

1. 30 m³, 24 m³, 6 m³
2. 90 cm³
3. 64 cm³
4. 84 cm³
5. 216 cm³
6. 450 cm³

Think. Cube numbers are number multiplied by themselves twice. The first three cube numbers are 1, 8, 27.

Page 72

1. 30 cm²
2. 30 cm²
3. 32 cm²
4. 10.5 cm²
5. 18 cm²
6. 24 cm²
7. 13 cm²
8. 42 cm²
9. 70 cm²

Think. 12 cm

Page 73

1. 10 cm²
2. 24 cm²
3. 18 cm²
4. 28 cm²
5. 25 cm²

6. 18 cm²

Think. Answers will vary. The area of the triangle will be half the area of the parallelogram.

Page 74

1. 18 cm²
2. 54 cm²
3. 60 cm²
4. 48 cm²
5. 64 cm²
6. 33 cm²
7. 36 cm²
8. 14 cm²
9. 75 cm²

Think. 3 cm

Page 75

1. 27.5 cm²
2. 144 cm²
3. 65 cm²
4. 60 cm²
5. 72 cm²
6. 36 cm²
7. 12 cm²
8. 231 cm²

Think. base = 12 cm, height = 3 cm

Page 76

1. cube
2. cuboid
3. cuboid
4. square-based pyramid
5. cuboid
6. impossible
7. triangular prism
8. hexagonal prism
9. net of a tetrahedron

Think. Answers will vary.

Page 77

1. 448 ÷ 4 = 112
2. 320 ÷ 5 = 64
3. 148 ÷ 4 = 37
4. 600 ÷ 8 = 75
5. 126 ÷ 4 = 31.5
6. 456 ÷ 8 = 57
7. 370 ÷ 5 = 74
8. 920 ÷ 8 = 115
9. 616 ÷ 4 = 154
10. 180 ÷ 8 = 22.5

Think. ×4, ×8, ×5

Page 78

1. $448 \div 8 = 56$
2. $390 \div 5 = 78$
3. $840 \div 20 = 42$
4. $600 \div 25 = 24$
5. $252 \div 8 = 31\cdot5$
6. $325 \div 5 = 65$
7. $3000 \div 25 = 120$
8. $422 \div 20 = 21\cdot1$
9. $616 \div 8 = 77$
10. $1200 \div 25 = 48$

Think. Answers will vary but may include divide by 100 then multiply by 2 and divide by 1000 and then multiply by 4.

In the textbook the hint for $\div 20$ should say 'Remember you can divide by 2, then divide by 10.' This will be corrected at the earliest opportunity.

Page 79

Questions to be answered using short division.

1. $124\frac{2}{3}$
2. $146\frac{1}{2}$
3. $65\frac{1}{9}$
4. $1321\frac{1}{7}$
5. $1585\frac{1}{3}$
6. $1173\frac{1}{2}$
7. $525\frac{1}{2}$
8. $826\frac{3}{7}$
9. $318\frac{1}{3}$
10. $981\frac{2}{7}$
11. $772\frac{7}{8}$

Think. 9909 and 4404

Page 80

1. $7407 \div 6 = 1234\frac{1}{2}$
2. $2423 \div 7 = 346\frac{1}{7}$
3. $8746 \div 4 = 2186\frac{1}{2}$
4. $5182 \div 8 = 647\frac{3}{4}$
5. $2273 \div 7 = 324\frac{5}{7}$
6. $4118 \div 9 = 457\frac{5}{9}$
7. $6522 \div 8 = 815\frac{1}{4}$
8. $4988 \div 9 = 554\frac{2}{9}$
9. $8324 \div 6 = 1387\frac{1}{3}$
10. $3170 \div 8 = 396\frac{1}{4}$
11. $9151 \div 4 = 2287\frac{3}{4}$
12. $4126 \div 6 = 687\frac{2}{3}$
13. $2766 \div 8 = 345\frac{3}{4}$
14. $4799 \div 7 = 685\frac{4}{7}$

Think. 3456

Page 81

Questions 1–9 to be answered using short division.

1. 316
2. 141
3. 157
4. 112
5. 257
6. 142
7. 77 r2
8. 2141 r1
9. 823

10. The remainders alternate between 0 and 3. If dividing by 3 all answers are whole numbers with no remainders.

Page 82

1. $2072 \div 6 = 345\frac{1}{3}$
2. $2002 \div 7 = 286$
3. $2727 \div 4 = 681\frac{3}{4}$
4. $8236 \div 8 = 1029\frac{1}{2}$
5. $2764 \div 9 = 307\frac{1}{9}$
6. $7253 \div 6 = 1208\frac{5}{6}$
7. The fractional part of the answers alternate between 0 and $\frac{1}{2}$. If the three non-zero digits are odd the answer will have the remainder $\frac{1}{2}$. If even, the answer will have no remainder.

Page 83

1. $\frac{1}{4} + \frac{1}{8} = \frac{3}{8}$
2. $\frac{1}{3} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$
3. $\frac{1}{12} + \frac{1}{6} = \frac{3}{12} = \frac{1}{4}$
4. $\frac{1}{10} + \frac{1}{5} = \frac{3}{10}$
5. $\frac{1}{2} + \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$
6. $\frac{1}{2} + \frac{1}{10} = \frac{6}{10} = \frac{3}{5}$
7. $\frac{1}{2} + \frac{1}{8} = \frac{5}{8}$
8. $\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$
9. $\frac{1}{2} + \frac{1}{5} = \frac{7}{10}$
10. $\frac{1}{3} + \frac{1}{8} = \frac{11}{24}$

Think. This will only work with two halves.

Page 84

1. $\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$
 2. $\frac{1}{5} + \frac{1}{8} = \frac{8}{40} = \frac{2}{10}$
 3. $\frac{1}{2} + \frac{1}{5} = \frac{7}{10}$
 4. Answers will vary.
- Think. Answers will vary but fractions should have a sum that is less than $\frac{1}{2}$.

Page 85

1. $\frac{1}{2} - \frac{1}{3} = \frac{1}{6}$
2. $\frac{1}{3} - \frac{1}{4} = \frac{1}{12}$
3. $\frac{1}{2} - \frac{1}{5} = \frac{3}{10}$
4. $\frac{1}{2} - \frac{1}{4} = \frac{1}{4}$
5. $\frac{1}{2} - \frac{1}{8} = \frac{3}{8}$
6. $\frac{1}{2} - \frac{1}{3} = \frac{2}{6} = \frac{1}{3}$
7. $\frac{1}{3} - \frac{1}{6} = \frac{1}{6}$
8. $\frac{1}{4} - \frac{1}{8} = \frac{1}{8}$
9. $\frac{1}{5} - \frac{1}{10} = \frac{1}{10}$

Page 86

1. $\frac{1}{4} = 25\%$, $\frac{1}{100} = 1\%$, $\frac{1}{10} = 10\%$, $\frac{1}{2} = 50\%$, $\frac{1}{5} = 20\%$, $\frac{3}{4} = 75\%$, $\frac{1}{8} = 12\cdot5\%$
 2. 36, 72, 54, 144
 3. 42, 84, 63, 168
 4. 25, 50, 37\cdot5, 100
 5. 68, 136, 102, 272
 6. 240, 120, 360
 7. 260, 130, 390
 8. 140, 70, 210
 9. 360, 180, 540
- Think. 201 and 200.

Page 87

Fraction	Percentage
$\frac{1}{2}$	50%
$\frac{1}{4}$	25%
$\frac{1}{10}$	10%
$\frac{1}{5}$	20%
$\frac{2}{5}$	40%
$\frac{3}{10}$	30%
$\frac{7}{10}$	70%
$\frac{1}{100}$	1%
$\frac{4}{5}$	80%
$\frac{3}{5}$	60%
$\frac{3}{4}$	75%
$\frac{1}{8}$	12\cdot5%

2. 558
 3. 294
 4. 312
 5. 416
 6. 203
 7. 473
 8. 342
 9. 276
- Think. 2010 is 10 more than 2000.

Page 88

- $1\% = \frac{1}{100}$, $10\% = \frac{1}{10}$, $50\% = \frac{1}{2}$,
 $25\% = \frac{1}{4}$, $75\% = \frac{3}{4}$, $30\% = \frac{3}{10}$,
 $20\% = \frac{1}{5}$
 - £2·40, £4·80, £13·20
 - £3·60, £7·20, £1·80
 - £5, £0·50, £5·50
 - £4·20, £0·42, £4·62
 - £42, £21, £63
 - £36, £18, £54
- Think. £350

Page 89

- £3·60
 - £5·60
 - £4·50
 - £6·40
 - £5·40
 - £13·20
 - £5·70
 - £9·20
 - £12·60
 - £3·40
 - £15·20
 - £8·70
 - £12
 - £21
 - £9·90
 - £11·40
- Think. 25, divide by 20.

Page 90

- £1·80, £16·20
£3·20, £28·80
 - £14, £42
£10·50, £31·50
£9·75, £29·25
 - £5·25, £29·75
£7·80, £44·20
£7·05, £39·95
- Think. £50

Page 91

- £26 is 50p more than £25·50
- 19
- £270
- 6
- £280, 35%
- £2·23
- £79·20
- £29·75

Page 92

x	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{2}{5}$
1	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{2}{5}$
2	1	$\frac{1}{2}$	$1\frac{1}{2}$	$\frac{2}{3}$	$1\frac{1}{3}$	$\frac{4}{5}$
3	$1\frac{1}{2}$	$\frac{3}{4}$	$2\frac{1}{4}$	1	2	$1\frac{1}{5}$
4	2	1	3	$1\frac{1}{3}$	$2\frac{2}{3}$	$1\frac{3}{5}$
5	$2\frac{1}{2}$	$1\frac{1}{4}$	$3\frac{3}{4}$	$1\frac{2}{3}$	$3\frac{1}{3}$	2
6	3	$1\frac{1}{2}$	$4\frac{1}{2}$	2	4	$2\frac{2}{5}$
7	$3\frac{1}{2}$	$1\frac{3}{4}$	$5\frac{1}{4}$	$2\frac{1}{3}$	$4\frac{2}{3}$	$2\frac{4}{5}$
8	4	2	6	$2\frac{2}{3}$	$5\frac{1}{3}$	$3\frac{1}{5}$
9	$4\frac{1}{2}$	$2\frac{1}{4}$	$6\frac{3}{4}$	3	6	$3\frac{3}{5}$
10	5	$2\frac{1}{2}$	$7\frac{1}{2}$	$3\frac{1}{3}$	$6\frac{2}{3}$	4
11	$5\frac{1}{2}$	$2\frac{3}{4}$	$8\frac{1}{4}$	$3\frac{2}{3}$	$7\frac{1}{3}$	$4\frac{2}{5}$
12	6	3	9	4	8	$4\frac{4}{5}$

Think. Answers will vary.

Page 93

- $\frac{6}{3}$ or two whole cakes
- $\frac{6}{5}$ or $1\frac{1}{5}$
- $\frac{9}{4}$ or $2\frac{1}{4}$
- $1\frac{3}{5}$
- $2\frac{2}{3}$
- $1\frac{4}{6}$ or $1\frac{2}{3}$
- $3\frac{3}{4}$

Think. Answers will vary.

Page 94

- $\frac{9}{4}$ or $2\frac{1}{4}$
- $\frac{6}{6}$ or 2 whole cakes
- $\frac{6}{5}$ or $1\frac{1}{5}$
- $2 \times \frac{4}{5} = \frac{8}{5} = 1\frac{3}{5}$
- $9 \times \frac{2}{3} = \frac{18}{3} = 6$
- $7 \times \frac{3}{4} = \frac{21}{4} = 5\frac{1}{4}$
- $4 \times \frac{3}{8} = \frac{12}{8} = 1\frac{1}{2}$
- $12 \times \frac{3}{4} = \frac{36}{4} = 9$
- $15 \times \frac{2}{3} = \frac{30}{3} = 10$
- $6 \times \frac{2}{5} = \frac{12}{5} = 2\frac{2}{5}$
- $3 \times \frac{2}{7} = \frac{6}{7}$

Think. Yes.

Page 95

- $7 \times \frac{2}{3} > 4 \times \frac{5}{6}$
- $6 \times \frac{3}{4} > 7 \times \frac{3}{8}$
- $3 \times \frac{7}{10} < 4 \times \frac{3}{5}$
- $4 \times \frac{5}{6} > 4 \times \frac{5}{12}$
- $5 \times \frac{7}{9} < 8 \times \frac{2}{3}$
- $15 \times \frac{1}{2} < 10 \times \frac{5}{6}$

Think. Yes.

Page 96

- $\frac{1}{2} \div 3 = \frac{1}{6}$
- $\frac{1}{2} \div 4 = \frac{1}{8}$
- $\frac{1}{2} \div 5 = \frac{1}{10}$
- $\frac{1}{3} \div 2 = \frac{1}{6}$
- $\frac{1}{3} \div 3 = \frac{1}{9}$
- $\frac{1}{3} \div 4 = \frac{1}{12}$
- $\frac{1}{4} \div 2 = \frac{1}{8}$
- $\frac{1}{4} \div 3 = \frac{1}{12}$
- $\frac{1}{4} \div 5 = \frac{1}{20}$
- $\frac{1}{5} \div 2 = \frac{1}{10}$
- $\frac{1}{5} \div 3 = \frac{1}{15}$
- $\frac{1}{5} \div 4 = \frac{1}{20}$

Think. Cake showing half split into six equal parts (twelfths).

Page 97

- $\frac{1}{3} \div 5 = \frac{1}{15}$
- $\frac{1}{3} \div 2 = \frac{1}{6}$
- $\frac{1}{3} \div 4 = \frac{1}{12}$
- $\frac{1}{3} \div 3 = \frac{1}{9}$
- $\frac{1}{4} \div 4 = \frac{1}{16}$
- $\frac{1}{4} \div 2 = \frac{1}{8}$
- $\frac{1}{4} \div 5 = \frac{1}{20}$
- $\frac{1}{4} \div 10 = \frac{1}{40}$
- $\frac{1}{5} \div 3 = \frac{1}{15}$
- $\frac{1}{5} \div 4 = \frac{1}{20}$
- $\frac{1}{5} \div 5 = \frac{1}{25}$
- $\frac{1}{5} \div 10 = \frac{1}{50}$

Think. $\frac{1}{2} \div 9 = \frac{1}{18}$, $\frac{1}{9} \div 2 = \frac{1}{18}$,
 $\frac{1}{6} \div 3 = \frac{1}{18}$, $\frac{1}{3} \div 6 = \frac{1}{18}$

Page 98

- $\frac{1}{2} \div 3 = \frac{1}{6}$
- $\frac{1}{3} \div 2 = \frac{1}{6}$
- $\frac{1}{2} \div 4 = \frac{1}{8}$
- $\frac{1}{3} \div 3 = \frac{1}{9}$
- $\frac{1}{2} \div 5 = \frac{1}{10}$
- $\frac{1}{4} \div 2 = \frac{1}{8}$
- $\frac{1}{5} \div 2 = \frac{1}{10}$
- $\frac{1}{4} \div 3 = \frac{1}{12}$
- $\frac{1}{4} \div 4 = \frac{1}{16}$
- $\frac{1}{4} \div 5 = \frac{1}{20}$

Think. Cake showing half split into six equal parts (twelfths), $\frac{1}{6}$

Page 99

1. 8
2. £60
3. $\frac{3}{4}$
4. 2
5. $1\frac{1}{3}$ bottles
6. $\frac{1}{3}$

Think. Answers will vary.

Page 100

1. 14
2. $\frac{1}{6}$
3. $\frac{1}{4} \times 3 = \frac{3}{4}$
4. $\frac{1}{12}$
5. £27.45
6. $\frac{5}{6}$
7. $\frac{7}{12}$
8. $\frac{1}{6}$

Page 101

1. 15
2. $\frac{11}{12}$
3. $\frac{5}{8}$
4. $1\frac{3}{4}$ eaten, $1\frac{1}{4}$ left
5. $\frac{2}{9}$ and 12
6. $\frac{3}{8}$

Think. Answers will vary.

Page 102

1. $985\ 613 - 80\ 000 = 905\ 613$
2. $972\ 816 + 3023 = 975\ 839$
3. $7095 + 801 = 7896$
4. $80 + 30 + 60 + 90 = 260$
5. $7 \cdot 61 + 1 \cdot 92 + 1 \cdot 35 = 10 \cdot 88$
6. $7 \times 3 + 2 = 23$
7. $3 \cdot 69 + 6 \cdot 2 = 9 \cdot 89$
8. $(9 - 3) \times 2 = 12$
9. $85 \cdot 66 - 30 \cdot 3 = 55 \cdot 36$
10. $(14 - 7) \times 7 + 4 = 53$
11. $\frac{1}{2} - \frac{1}{3} = \frac{1}{6}$
12. $600 \div 25 = 24$
13. $\frac{1}{2} - \frac{1}{4} = \frac{2}{8} = \frac{1}{4}$
14. $9 \times \frac{2}{3} = 6$
15. $7 \times \frac{3}{4} = \frac{21}{4} = 5\frac{1}{4}$
16. $2727 \div 4 = 681\frac{3}{4}$
17. 15% of £80 = £12
18. $(12 - 10) \div 2 = 1$
19. $81 + 76 + 23 = 180$
20. $(3 + \frac{1}{2}) \times 2 = 7$
21. $15\ 000 + 43\ 000 = 58\ 000$
22. $4 \cdot 78 + 2 \cdot 47 + 1 \cdot 79 = 9 \cdot 04$
23. $12 \div (2 + 4) \times 3 = 6$
24. $58 \cdot 25 + 19 \cdot 78 = 78 \cdot 03$

25. $11 \cdot 27 - 4 \cdot 99 = 6 \cdot 28$
26. $3 \cdot 4 - 2 \cdot 8 = 0 \cdot 6$
27. $54 \cdot 72 - 8 \cdot 99 = 45 \cdot 73$
28. $616 \div 8 = 77$
29. $5785 \div 7 = 826\ r\ 3$ or $826\frac{3}{7}$
30. $\frac{1}{2} - \frac{1}{6} = \frac{1}{3}$
31. $15 \times \frac{2}{3} = 10$
32. $6 \times \frac{2}{5} = \frac{12}{5} = 2\frac{2}{5}$
33. $7253 \div 6 = 1208\ r5$ or $1208\frac{5}{6}$
34. 90% of £11 = £9.90
35. $m = n = 2$
36. $x = 2, y = 6$ or $x = 6, y = 2$

Page 103

1. $\frac{1}{2} + \frac{3}{4} = 1\frac{1}{4}$, one solution
2. 18 more solutions for example
 $\frac{1}{2} + \frac{4}{4} = 1\frac{5}{6}, \frac{2}{1} + \frac{4}{3} = 3\frac{1}{3},$
 $\frac{2}{1} + \frac{3}{4} = 2\frac{3}{4}$
3. Answers will vary, for example
 $\frac{4}{8} + \frac{7}{6} = 1\frac{2}{3}$
4. Answers will vary, but should result in a mixed number answer
5. Answers will vary, but the numerator should be more than twice the value of the denominator. The digit value of the numerator should also be more than twice the digit value of the whole number.
6. It is possible if the digits chosen are multiples of each other. For example $2 \times \frac{10}{4} = \frac{10}{8} = 1\frac{2}{8} = 1\frac{1}{4}$
7. It is possible if none of the digit values are multiples of each other. For example $\frac{7}{3} \times 2 = \frac{7}{6} = 1\frac{1}{6}$