

Addition and





Contents

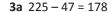
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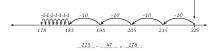
Series Authors:

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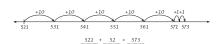
Page 1

- 1 Answers will vary.
- 2 Answers will vary.



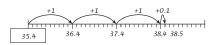


b 521 + 52 = 573

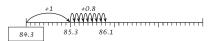


Pages 2-3

1a 35.4 + 3.1 = 38.5

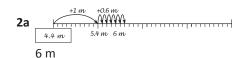


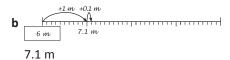
b 84.3 + 1.8 = 86.1



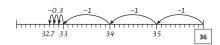
c <u>17.6</u> + <u>1.9</u> = <u>19.5</u>



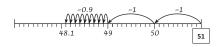




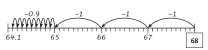
3a 36 - 3.3 = 32.7



b 51 - 2.9 = 48.1



c
$$68 - 3.9 = 64.1$$





Page 4

1a 647

$$478 + 100 = 578$$

 $578 + 60 = 638$
 $638 + 9 = 647$

b 723

507 + 200 = 707
707 + 10 = 717
717 + 6 = 723

c <u>581</u>

$$345 + 200 = 545$$

 $545 + 30 = 575$
 $575 + 6 = 581$

2a 268

$$421 - 100 = 321$$

 $321 - 50 = 271$
 $271 - 3 = 268$

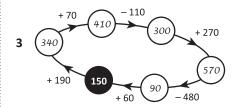
b 494

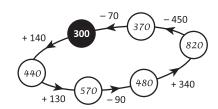
632 – 100 = 53
532 - 30 = 50
502 - 8 = 49

c <u>333</u>

$$954 - 600 = 354$$

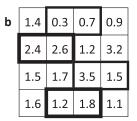
 $354 - 20 = 334$
 $334 - 1 = 333$





Pages 5-6

1a	1.7	1.5	3.8	3.1
	1.3	1.2	3.2	3.6
	6.3	6.4	5.1	5.5
	6.2	6.6	5.6	2.5



0	1.6	1.1	2.3	1.5
•	1.2	1.4	1.5	2.7
	1.7	2.5	2.9	3.3
	2.1	1.8	3.2	3.5

2a 34.6

b 25.5

c 53.3

3a 12.2 cm

b 16.8 cm

c 13.2 cm

4a 37.5

b 51.6

c 46.3

5a £6.30

b £13.35

c £127.20

Page 7

424 + 70



$$(-2) = 492$$

Page 7

254

$$(-2)$$
 = 252

685

324

412

Page 8

$$9.5 + 3 \quad (-0.2)$$

$$6.4 + 3 + 0.1$$

$$8.3 + 2 \left(-0.2\right)$$

$$2.4 + 1 \quad (-0.1)$$

$$5.3 - 4 + 0.2$$

$$(+ 0.2) = \underline{1.5}$$

$$7.2 - 3 + 0.1$$

22.7

$$32.5 - 10 + 0.2$$

Pages 9-10

2b
$$88 + 26$$
 $+2$
 -2

$$90 + 24 = 114$$

$$30 + 58 = 88$$

d
$$83 + 12$$

$$\downarrow \qquad \downarrow$$

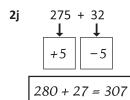
$$-3 \qquad +3$$

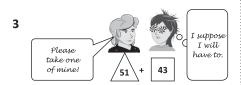
e
$$61 + 24$$

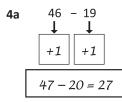
$$\downarrow \qquad \downarrow$$

$$-1 \qquad +1$$

Pages 9-10

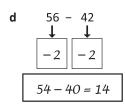






b
$$85 - 33$$

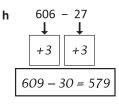
 -3 -3 -3 $82 - 30 = 52$

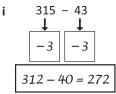


e
$$94 - 58$$
 $+2$
 $+2$
 $+2$
 $+2$

f 595 - 11
$$-1$$
 -1
 -1
 -1
 -1

4g
$$244 - 39$$
 $+1$ $+1$ $+1$ $245 - 40 = 205$





- **5a** 34 kg
- **b** £51
- **c** 380 pigs
- d 75 mints

Pages 11-12

1 249 + 142 = 391

2	250				
	96	87	67		
	32	71	147		
	122	92	36		

330				
183	89	58		
45	175	110		
102	66	162		

- **3** Possible answers.
- a 159 + 235 = 394
- **b** 158 + 241 = 399
- c <u>1145</u> <u>759</u> = <u>386</u>
- **d** 1113 748 = 365

4a		Total fat	Total sugar
	Sam	1.2 g + 33.8 g = 35 g	28.3 g + 12.3 g + 30 g = 70.6 g
	Nate	0.7 g + 33.8 g + 12 g = 46.5 g	1.6 g + 12.3 g + 61 g = 74.9 g
	Wil	1.2 g + 9.3 g + 0 g = 10.5 g	28.3 g + 5.4 g + 30 g = 63.7 g
	Trey	0.7 g + 9.3 g + 0 g = 10 g	1.6 g + 5.4 g + 4.9 g = 11.9 g

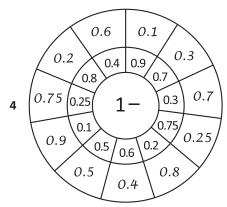
- **b** Trey
- 5 Answers will vary.

Pages 13-14

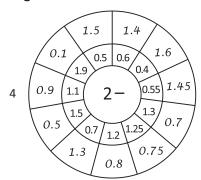
1	Across	Down
	1. 153	2. 57
	4. 73	3. 33
	6. 38	5. 48
	7. 14	6. 32

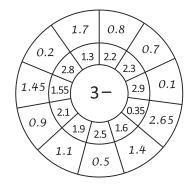
1 1	2 5	3 3		
	4 7	3		
5 4			6 3	8
8			2	
	⁷ 1	4		

- 2 Answer: 252
- **3a** £309
- **b** £257



Pages 13-14





5a £31

b £7.96

c £71.97

d £2.80

Page 15

	What is the total?	R
	minus	G
	Who has less?	G
	How many altogether?	R
	Who has more?	G
	Find the difference between	G
	How many more than?	G
	plus	R
2 a	£6.40; £6.90; £3.60; £7.50; £24.40)
	£7.50; £6.80; £6.40; £3.20; £23.90)
b	Stef	
С	£0.50	

1 Find the difference between ...

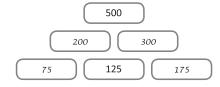
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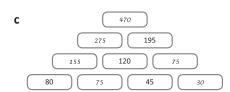
Step 1: 614; 472; 277; 726; 136
Step 2: 472; 277; 726; 136; 614
Step 3: A; D; D; R; E; S; S

Address

2a 130 55 75

b Answers will vary. Sample answer:





Page 17

What to do

Observe students.

Page 18

G

What to do

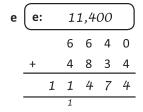
Observe students.

Page 19

What to do

Numbers add up to 210 $210 \div 6 = 35$

Pages 20-21



2a 2118

b £3,490

Pages 20-21

			/		
				1	
		6	6	1	0
	+	3	3	0	9
3 b		3	3	0	1

5a 6,657 people

b 5,935 people

c 1,627 people

d 140 books

Pages 22-23

1f
$$e: 6,000$$

 $8 \times 17 \times 10$
 $-2 \times 09 \times 3$
 $6 \times 3 \times 7$

h (e:
$$87,000$$
)

9 $8 \frac{6}{7} \frac{15}{5} \frac{1}{5} \frac{1}{2}$

- 1 1 3 9 6

8 7 3 6 6

2a-d Answers will vary.

3a £4,622

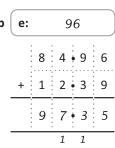
b £3,959

c £1,530

d Yes – £1,134 cheaper.

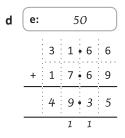
4 Answers will vary. A mental strategy would be easier than trading the 0s.

Pages 24-25



Pages 24-25

1c ×	« e:			120		
			9	8	6	2
	+		1	9 •	3	8
		1	1	8	0	0
			1	1	1	



2e	e:			
		5		9
	-	3	9	9
		2 (7	0

3 55p or £0.55

4 Café Uno: £13.50
Bill's Burgers: £16.85
Sushi Heaven: £14.00
Pete's Pizza: £26.50

5a Bill's Burgers was cheaper by £9.65.

b Cafe Uno – cheapest;Pete's Pizza – most expensive.It cost £13 more.

c £29.15

Page 26

1a Total population 50,762,900 4,450,620 more males

b Matilda weighs 31.5 kg. Mass of family is 258.5 kg.

c 59,570,000 km

d 273 blocks

e They each received £16.; He owes £2.75.

What to do next

a See table.

b See table.

c Deposit

d £1,598.24

e £3,093.94

f £1,519.65

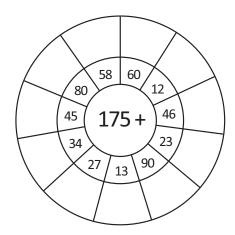
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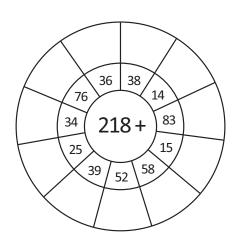
Answers will vary.

Page 27

Date	Transaction	Withdrawals	Deposits	Balance
30 Oct 2014	Opening balance			3596.84
01 Nov 2014	Salary/pay		1546.97	5143.81
05 Nov 2014	Groceries	123.98		5019.83
05 Nov 2014	Gas	67.45		4952.38
06 Nov 2014	New clothing	125.40		4826.98
08 Nov 2014	Municipal tax	845.00		3981.98
10 Nov 2014	Deposit		345.78	4327.76
11 Nov 2014	Account fee	5.00		4322.76
13 Nov 2014	Electricity bill	674.65		3648.11
15 Nov 2014	Salary/pay		1546.97	5195.08
	Opening Balance	Total Debits	Total Credits	Closing Balance
	\$3596.84	\$1841.48	\$3439.72	\$5195.08

Complete these addition wheels.





Show how you would solve 26.7 + 4.4 using:

Jump strategy

Split strategy

Compensation strategy

Skills	Not yet	Kind of	Got it
Calculates basic addition facts			
Demonstrates mental addition strategies for: Jump Split Compensation			

	18	72	53.2	48	16.5	9.1	100
- 2.9							
how how y	ou would solve	e 375 – 128 u	using:				
			Bump	strategy			
	Split str	ategy			Compensa	tion strategy	,
	Split str	ategy			Compensa	tion strategy	,
	Split str	ategy			Compensa	tion strategy	,
	Split str	ategy			Compensa	tion strategy	,

Skills	Not yet	Kind of	Got it
Calculates basic subtraction facts			
Demonstrates mental subtraction strategies for: Bump Split Compensation			

Applying strategies

Name	

1 Read the problems below carefully. Complete each section of each problem. Use any strategy or written method that you find the easiest.

_		
	a Max is reading an exciting book that is 316 pages long. If he has read 79 pages, how many does he have left to read? What do I need to find out?	My estimate: My working out:
	b 645 pupils go to Cherry Lane Primary School. If there are 125 pupils in nursery and reception, and 378 in the infants, how many are in the juniors? What do I need to find out?	My estimate: My working out:
	c Jack ran 6.75 km on Monday, 4.67 km on Wednesday and 8.85 km on Saturday. How far short of his training program is he if he should be running 25 km in a week? What do I need to find out?	My estimate: My working out:

Skills	Not yet	Kind of	Got it
Solves addition and subtraction problems using own strategy or written method			
Identifies the question			
Provides a reasonable estimate			

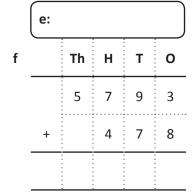
1 Complete these addition problems. Write an estimate for each:

	e:				
а		Th	Н	Т	o
		2	9	3	2
	+		5		9
			•	•	

	e:				
b		Th	Н	Т	0
			3	4	2
	+	•	3	6	7
		•			

	e:				
С		Th	Н	Т	0
		2	6	7	8
	_		5	6	5

	e:				
d		Th	Н	Т	0
		3	4	2	3
	+	9	7	8	7
				9	9



	e:					
g		Н	Т	0	Т	Н
			6	3	2	3
	-		4	6	0	8

	e:				
h		Т	0	Т	Н
		5	6	2	
	+	2	5 •	1	6

	e:				
		Т	0	Т	Н
			9 (5	1
	-		4 (3	9
		•			

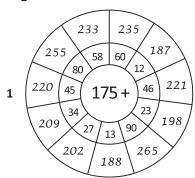
Skills	Not yet	Kind of	Got it
Solves addition and subtraction problems using a written algorithm			
Adds and subtracts decimals in an algorithm			
Provides a reasonable estimate			

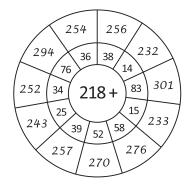
Series G – Addition and Subtraction – Student Progress Record

Name	Class	Date
What went well:		
		_
	nd Subtraction – Studer	
Name	Class	Date
What went well:		
What I need to improve:		
-		
·		

ASSESSMENT ANSWERS

Page 1





2 Jump strategy



26.7 + 4.4 = 31.1

Split strategy

26.7 + 4.4

$$= (26 + 4) + (0.7 + 0.4)$$

= 30 + 1.1

= 31.1

Compensation strategy

26.7 + 4.4

$$\rightarrow$$
 27 + 4.4 $-$ 0.3

= 31.4 - 0.3

= 31.1

Page 2

2 Bump strategy

$$375 - 128$$
 \downarrow
 $+2 + 2$
 $377 - 130 = 247$

Split strategy

$$375 - 128$$

$$\rightarrow$$
 375 $-$ 100 = 275

$$275 - 20 = 255$$

$$255 - 8 = 247$$

$$375 - 128 = 247$$

Compensation strategy

$$375 - 128$$

$$\rightarrow$$
 375 $-$ 130 + 2

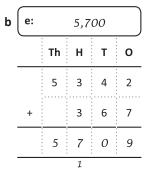
$$= 245 + 2$$

= 247

$$375 - 128 = 247$$

Page 4

1a	e:	3,600					
		Th	Н	Т	0		
		2	9	3	2		
	+		5	9	9		
		3	5	3	1		
		1	1	1			



Page 3

a Max is reading an exciting book that is 316 pages long. If he has read 79 pages, how many does he have left to read?

What do I need to find out?

The pages left to read.

My estimate: 240

My working out:

316 - 1 + 80

= 237 = 1 + 236

Max has 237 pages left to read.

b 645 pupils go to Cherry Lane Primary School. If there are 125 pupils in nursery and reception, and 378 in the infants, how many are in the juniors?

What do I need to find out?

The number of pupils in the upper primary.

My estimate: 150

My working out: 378 + 125 → 380 + 125 - 2

= 505 - 503 = 2

645 - 503

 $\rightarrow 645 - 145 = 500$

145 - 142 = 3

There are 142 pupils in the juniors.

c Jack ran 6.75 km on Monday, 4.67 km on Wednesday and 8.85 km on Saturday. How far short of his training program is he if he should be running 25 km in a week?

What do I need to find out?

The gap between how far Jack ran and how far he needs to run.

My estimate: 5

My working out:

6 • 7 5 4 • 6 7

2 0 • 2

25 - 4.73 = 20.27

Jack is 4.73 km short of his program.

Page 4

1c (e:	2,100					
		Th	н	т	o		
		2	6	7	8		
	-		5	6	5		
-		2	1	1	3		

d	e:	4,200						
		Th	Н	т	0			
		3	4	2	3			
	+		7	8	7			
		4	2	1	0			
		1	1	1				

е	e:	6,100						
		Th	Н	Т	o			
		6	³ ⁄ ₄ /	7	8			
	-		3	8	8			
		6	0	9	0			

f	e:	6,200						
		Th	н	Т	0			
		5	7	9	3			
	+		4	7	8			
		6	2	7	1			
		1	1	1				

g	e:	18.00					
		Н	т	0	Т	Н	
		•	5 Ø	3	¹ ⁄2	¹ 3	
	-		4	6	0	8	
			1	7	1	5	

h	e:	80			
		Т	0	Т	Н
		5	6	2	
	+	2	5 •	1	6
		8	1 •	3	6
		1			

i	e:	5.00			
		Т	0	Т	Н
			9	45	1
	-		4	• 3	9
			5	1	2

Topic	Reference	Strand	Substrand	Objective
Mental Strategies	6C6	Number	Calculation	Perform mental calculations, including with mixed operations and large numbers.
Applying Strategies	6C4	Number	Calculation	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Written Methods	6C3	Number	Calculation	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
All	6C8	Number	Calculation	Solve problems involving addition, subtraction, multiplication and division.