

Mathletics

Series



Teacher



214 + 138

214 + 138 = 352

Addition and Subtraction



Series F – Addition and Subtraction

Contents

Student book answers _____	1
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Series Authors:

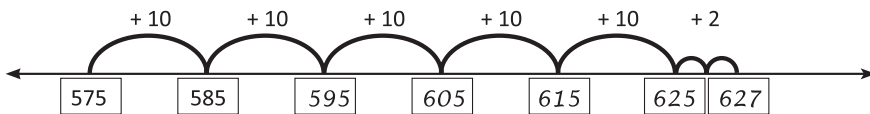
Rachel Flenley
Nicola Herringer

Series F – Addition and Subtraction

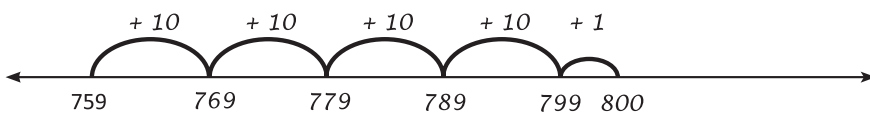
Pages 1–2

1	289	224	335	115	432
	279	214	325	105	422
	269	204	315	95	412
	259	194	305	85	402
	249	184	295	75	392

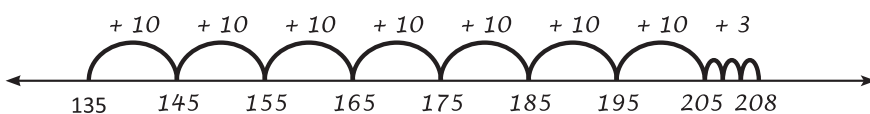
2a 627;



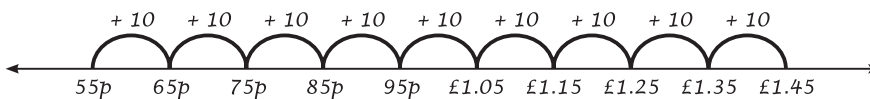
b 800;



c 208;



3a

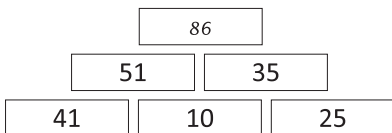


b £1.70

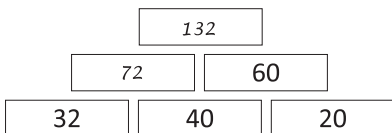
c £3.15

d Choc mints and cream chocs.

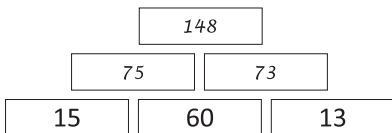
4a



b



c



Pages 3–4

1b $38 + 26$

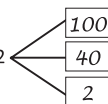


$$\begin{array}{r} 38 + 20 = 58 \\ \hline \end{array}$$

$$\begin{array}{r} 58 + 6 = 64 \\ \hline \end{array}$$

$$38 + 26 = \boxed{64}$$

c $156 + 142$



$$\begin{array}{r} 156 + 100 = 256 \\ \hline \end{array}$$

$$\begin{array}{r} 256 + 40 = 296 \\ \hline \end{array}$$

$$\begin{array}{r} 296 + 2 = 298 \\ \hline \end{array}$$

$$156 + 142 = \boxed{298}$$

2b 263; 33

c 350; 67

d 593; 61

e 567; 142

f 375; 246

3a 209

b 497

c 195

d 796

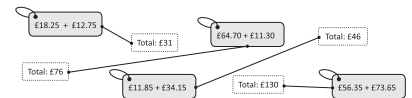
e 597

f 287

4

Distances to add	Total distance
$55 + 45$	100 km
$476 + 55$	531 km
$235 + 75$	310 km
$452 + 75$	527 km

5



Pages 5–6

1a 50

b 70

c 230

d 70

e 90

f 460

g 960

h 790

2a $45 + 37$

$$= \boxed{82}$$

$45 + 40$

(-3)

85

(-3)

$= 82$

b $66 + 18$

$$= \boxed{84}$$

$66 + 20$

(-2)

86

(-2)

$= 84$

Series F – Addition and Subtraction

Pages 5–6

2c $86 + 49 = \boxed{135}$

$86 + \underline{50} \text{ } (-1)$

$\underline{136} \text{ } (-1) = \underline{135}$

d $124 + 57 = \boxed{181}$

$124 + \underline{60} \text{ } (-3)$

$\underline{184} \text{ } (-3) = \underline{181}$

3a $26 + 42 = \boxed{68}$

$26 + 40 \text{ } (+2)$

$\underline{66} \text{ } (+2) = \underline{68}$

b $35 + 63 = \boxed{98}$

$35 + \underline{60} \text{ } (+3)$

$\underline{95} \text{ } (+3) = \underline{98}$

c $96 + 21 = \boxed{117}$

$96 + \underline{20} \text{ } (+1)$

$\underline{116} \text{ } (+1) = \underline{117}$

d $145 + 34 = \boxed{179}$

$145 + \underline{30} \text{ } (+4)$

$\underline{175} \text{ } (+4) = \underline{179}$

4 When we round down we compensate by subtracting
 When we round up we compensate by adding

5a 492

b 771

c 366

d 816

e 389

f 194

6a 323

b 394

c Wednesday and Friday

Page 7

What to do

Observe students.

Page 8

a 827; Y

582; D

927; E

509; S

827; Y

856; N

SYDNEY

b 509; S

922; A

780; I

667; P

412; R

PARIS

c 856; N

975; O

856; N

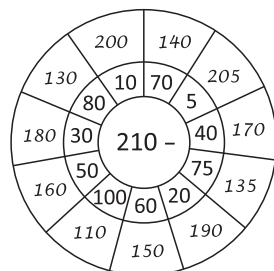
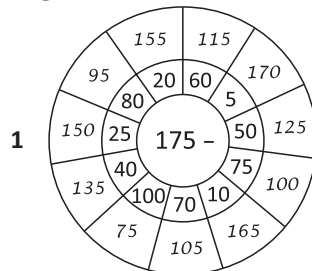
909; L

975; O

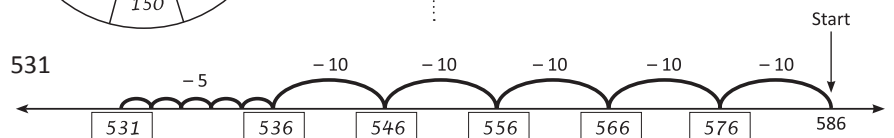
582; D

LONDON

Pages 9–10



2a 531



2b 343

c 593

d 60

3a 244

b 811

c 394

d 723

e 154

f 765

4 £30; £75; £11; £44

5a £29

b Taekwondo Team

c £45

Pages 11–12

1b $200 + 80 + 9$

c $800 + 60 + 7$

d $900 + 20 + 3$

e $400 + 40 + 2$

f $200 + 90 + 4$

2a $468 - 316 = \begin{array}{|c|} \hline 300 \\ \hline 10 \\ \hline 6 \\ \hline \end{array}$

$468 - 300 = \underline{168}$

$\underline{168} - 10 = \underline{158}$

$\underline{158} - 6 = \underline{152}$

$468 - 316 = \underline{152}$

b $574 - 155 = \begin{array}{|c|} \hline 100 \\ \hline 50 \\ \hline 5 \\ \hline \end{array}$

$574 - 100 = \underline{474}$

$474 - 50 = \underline{424}$

$424 - 5 = \underline{419}$

$574 - 155 = \underline{419}$

Series F – Addition and Subtraction

Pages 11–12

2c $457 - 323$

$\begin{array}{r} 300 \\ 20 \\ 3 \end{array}$

 $\begin{array}{r} 457 \\ - 300 \\ \hline 157 \\ - 20 \\ \hline 137 \\ - 3 \\ \hline 134 \end{array}$

$457 - 323 = 134$

- 3a 410
 b 320
 c 300
 d 370
 e 390
 f 395
 g 405
 h 480
 i 495
 j 645
 k 310

S	Y	H	O	U	E	R	X	E	L	A
300	195	410	305	150	320	505	370	595	405	200
X	Z	R	I	D	R	J	U	M	V	A
390	495	220	395	210	385	480	500	205	645	310

Y O U R E A R D R U M

4a $375 - 164$

$\begin{array}{r} 100 \\ 60 \\ 4 \end{array}$

 $\begin{array}{r} 375 \\ - 100 \\ \hline 275 \\ - 60 \\ \hline 215 \\ - 4 \\ \hline 211 \end{array}$

$375 - 100 = 275$
 $275 - 60 = 215$
 $215 - 4 = 211$
 $375 - 164 = 211$ ✓

b $429 - 143$

$\begin{array}{r} 100 \\ 40 \\ 3 \end{array}$

 $\begin{array}{r} 429 \\ - 100 \\ \hline 329 \\ - 4 \\ \hline 319 \\ - 3 \\ \hline 316 \end{array}$

$429 - 100 = 329$
 $329 - 4 = 319$
 $319 - 3 = 316$
 $429 - 143 = 316$ ✗

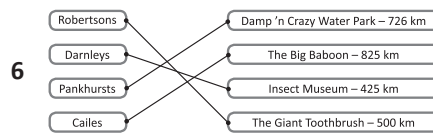
4c $179 - 158$

$\begin{array}{r} 100 \\ 50 \\ 8 \end{array}$

 $\begin{array}{r} 179 \\ - 100 \\ \hline 79 \\ - 50 \\ \hline 29 \\ - 8 \\ \hline 21 \end{array}$

$179 - 100 = 79$
 $79 - 50 = 29$
 $29 - 8 = 21$
 $179 - 158 = 21$ ✗

- 5 Robertsons: 235 km
 Pankhursts: 501 km
 Cailes: 300 km
 Darnleys: 295 km



Pages 13–14

- 1b $50 - 2$
 c $50 + 2$
 d $80 - 4$
 e $60 - 3$
 f $40 - 3$
 g $30 - 3$
 h $70 - 2$

2a $585 - 78 = 507$

$585 - 80 = 505$
 $505 + 2 = 507$

b $894 - 71 = 823$

$894 - 70 = 824$
 $824 - 1 = 823$

c $163 - 149 = 14$

$163 - 150 = 13$
 $13 + 1 = 14$

3a $555 - 63$

$555 - 60 = 495$
 $495 - 3 = 492$

b $775 - 98$

$775 - 100 = 675$
 $675 + 2 = 677$

c $644 - 139$

$644 - 140 = 504$
 $504 + 1 = 505$

d $594 - 329$

$594 - 330 = 264$
 $264 + 1 = 265$

e $432 - 204$

$432 - 200 = 232$
 $232 - 4 = 228$

4a $454 - 27 = 427$

b $568 - 308 = 260$

c $994 - 78 = 916$

d $678 - 452 = 226$

e $684 - 59 = 625$

f $348 - 128 = 220$

5

-17	-21	-98	-33
600	124	395	800
583	103	297	767
566	82	199	734
549	61	101	701

Series F – Addition and Subtraction

Pages 13–14

6

£4.50 – £2.75	£5.70 – £3.00 = £2.70	£2.45 + £0.15 =	£4.35
£10.00 – £6.25	£4.50 – £3.00 = £1.50	£4.25 + £0.10 =	£3.75
£5.70 – £3.05	£17.25 – £13.00 = £4.25	£1.50 + £0.25 =	£2.60
£17.25 – £12.90	£9.45 – £7.00 = £2.45	£4.00 – £0.25 =	£2.65
£9.45 – £6.85	£10.00 – £6.00 = £4.00	£2.70 – £0.05 =	£1.75

Page 15

What to do

Observe students.

Page 16

What to do

Observe students.

Pages 17–18

e: 850

1a

	H	T	O
	5	4	1
+	3	1	3
	8	5	4
	□	□	

e: 800

b

	H	T	O
	1	7	3
+	5	9	2
	7	6	5
	□	□	

e: 600

c

	H	T	O
	3	8	4
+	2	1	3
	5	9	7
	□	□	

e: 700

d

	H	T	O
	2	6	8
+	4	9	3
	7	6	1
	□	□	

e: 5,600

e

	Th	H	T	O
	2	2	1	7
+	3	4	0	8
	5	6	2	5
	□	□	□	□

e: 5,800

f

	Th	H	T	O
	4	5	1	6
+	1	3	4	3
	5	8	5	9
	□	□	□	

e: 6,500

g

	Th	H	T	O
	5	3	8	9
+	1	2	7	4
	6	6	6	3
	□	□	□	□

e: 4,600

h

	Th	H	T	O
	3	2	8	1
+	1	4	2	8
	4	7	0	9
	□	□	□	

2 Answer will vary.

3a

	H	T	O
	4	3	5
+	4	2	2
	8	5	7

3b

	H	T	O
	1	5	9
+	2	4	7
	4	0	6
	□	□	

c

	H	T	O
	5	6	7
+	4	2	9
	9	9	6
	□	□	

e: 27,500

4a

	T	Th	H	T	O
	1	5	4	4	3
+	1	2	0	3	6
	2	7	4	7	9
	□	□	□	□	

e: 48,500

b

	T	Th	H	T	O
	3	8	1	9	1
+	1	0	2	8	7
	4	8	4	7	8
	□	□	□	□	

e: 80,400

c

	T	Th	H	T	O
	4	6	7	3	8
+	3	3	6	9	6
	8	0	4	3	4
	□	□	□	□	

e: 80,700

d

	T	Th	H	T	O
	2	5	8	7	4
+	5	4	7	9	9
	8	0	6	7	3
	□	□	□	□	

e: 93,200

e

	T	Th	H	T	O
	4	8	5	7	9
+	4	4	6	4	8
	9	3	2	2	7
	□	□	□	□	

e: 129,000

f

	T	Th	Th	H	T	O
	7	8	4	2	8	
+	5	0	5	6	5	
	1	2	8	9	9	3
	□	□	□	□	□	

e: 410,200

g

	H	Th	T	Th	H	T	O
	2	5	3	7	0	4	
+	1	5	6	4	8	5	
	4	1	0	1	8	9	
	□	□	□	□	□		

e: 773,500

h

	H	Th	T	Th	H	T	O
	5	0	8	9	4	1	
+	2	6	4	5	3	7	
	7	7	3	4	7	8	
	□	□	□	□	□		

e: 927,500

i

	H	Th	T	Th	H	T	O
	4	6	9	5	5	3	
+	4	5	7	9	8	6	
	9	2	7	5	3	9	
	□	□	□	□	□		

e: 842,900

j

	H	Th	T	Th	H	T	O
	1	8	8	4	3	8	
+	6	5	4	4	5	7	
	8	4	2	8	9	5	
	□	□	□	□	□		

e: 749,400

k

	H	Th	T	Th	H	T	O
	3	6	0	9	9	4	
+	3	8	8	4	3	7	
	7	4	9	4	3	1	
	□	□	□	□	□		

e: 1,504,700

l

	H	Th	T	Th	H	T	O
	6	5	7	7	2	7	
+	8	4	6	9	7	8	
	1	5	0	4	7	0	5
	□	□	□	□	□		

Series F – Addition and Subtraction

Pages 19–21

e: 4,800

1a

	Th	H	T	O
	4	9	7 ⁸	1 ²
-		1	5	3
	4	8	2	9

e: 2,100

b

	Th	H	T	O
	2	8 ⁹	14 ⁵	1 ¹
-		8	7	8
	2	0	7	3

e: 3,300

c

	Th	H	T	O
	3	7 ⁸	16 ⁷	1 ²
-		5	8	6
	3	2	8	6

2a

	Th	H	T	O
	7	8	6	9
-	4	1	2	9
	3	7	4	0

km

b

	Th	H	T	O
	3	2	5 ⁶	1 ²
-	1	2	3	3
	2	0	2	9

km

c

	Th	H	T	O
	6 ⁷	13 ⁴	1 ¹	9
-		5	9	5
	6	8	2	4

km

d

	Th	H	T	O
	3	2	5 ⁶	1 ²
-	1	2	2	6
	2	0	3	6

km

e: 13,600

3a

	TTh	Th	H	T	O
	1	5	6	8	5
-		2	0	7	3
	1	3	6	1	2

e: 27,900

b

	TTh	Th	H	T	O
	3	7 ⁸	1 ¹	8 ⁹	1 ²
-	1	0	2	8	4
	2	7	9	0	8

e: 5,000

c

	TTh	Th	H	T	O
	3 ⁴	1 ²	6 ⁷	1 ³	5
-	3	7	6	9	3
		5	0	4	2

e: 26,900

d

	TTh	Th	H	T	O
	7 ⁸	11 ²	15 ⁶	16 ⁷	1 ¹
-	5	5	7	9	5
	2	6	8	7	6

e: 12,500

e

	TTh	Th	H	T	O
	5	7 ⁸	1 ¹	5 ⁶	1 ⁵
-	4	5	6	3	8
	1	2	5	2	7

e: 18,900

f

	TTh	Th	H	T	O
	8 ⁹	9 ⁰	15 ⁶	1 ²	8
-	7	1	7	6	4
	1	8	8	6	4

e: 203,200

g

	HTh	TTh	Th	H	T	O
	2	5	8	6 ⁷	10 ¹	1 ⁴
-		5	5	4	7	6
	2	0	3	2	3	8

e: 762,700

3h

	HTh	TTh	Th	H	T	O
	7 ⁸	10 ¹	7 ⁸	11 ²	1 ⁵	
-		4	5	2	3	6
	7	6	2	6	8	9

e: 5,600

i

	HTh	TTh	Th	H	T	O
	4	5 ⁶	13 ⁴	1 ³	8 ⁹	1 ²
-	4	5	8	7	8	7
		5	6	0	5	

e: 329,400

j

	HTh	TTh	Th	H	T	O
	9	7 ⁸	13 ⁴	10 ¹	12 ³	1 ²
-	6	5	4	7	5	5
	3	2	9	3	7	7

e: 79,500

k

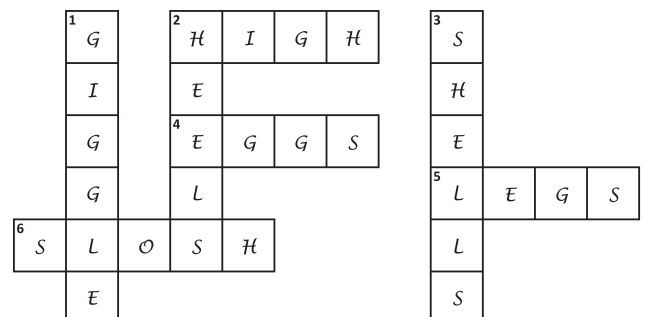
	HTh	TTh	Th	H	T	O
	3 ⁴	15 ⁶	1 ⁷	8 ⁹	11 ²	1 ³
-	3	8	8	4	3	7
	7	9	4	8	6	

e: 180,800

l

	HTh	TTh	Th	H	T	O
	5 ⁶	1 ⁸	6 ⁷	1 ⁷	7 ⁸	1 ⁷
-	4	7	6	9	7	8
	1	8	0	8	0	9

- 4 Across
- 4,614
 - 5,663
 - 5,637
 - 45,075
- Down
- 376,616
 - 57,334
 - 577,345



5 Answers will vary.

Pages 22–23

e: 85

1a

	T	O	t
	5	4	• 1
+	3	1	• 3
	8	5	• 4
	<input type="text"/>	<input type="text"/>	

e: 90

b

	T	O	t
	3	2	• 3
+	5	8	• 1
	9	0	• 4
	<input type="text"/>	<input type="text"/>	

e: 90

c

	T	O	t
	4	8	• 4
+	4	1	• 3
	8	9	• 7
	<input type="text"/>	<input type="text"/>	

e: 70

d

	T	O	t
	2	7	• 8
+	3	9	• 3
	6	7	• 1
	<input type="text"/>	<input type="text"/>	

e: 90

e

	T	O	t	h
	5	2	• 1	7
+	3	5	• 9	2
	8	8	• 0	9
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Series F – Addition and Subtraction

Pages 22–23

e: 60

1f

	T	O	t	h
	4	5	• 1	
+	1	4	• 0	5
	5	9	• 1	5
	□	□	□	

e: 65

g

	T	O	t	h
	5	3	• 8	9
+	1	2	• 1	4
	6	6	• 0	3
	□	□	□	□

e: 50

h

	T	O	t	h
	3	2	• 4	1
+	1	9	• 3	3
	5	1	• 7	4
	□	□	□	

e: 5

2a

	O	t	h
	8	• 4	3
-	3	• 2	3
	5	• 2	0

e: 4

b

	O	t	h
	8	• 10	8
-	5	• 3	2
	3	• 7	6

e: 5

c

	O	t	h
	7	• 5	13
-	2	• 0	4
	5	• 5	9

e: 6

2d

	O	t	h
	9	• 6	10
-	3	• 2	3
	6	• 4	7

3 0.57 sec

4 1.49; 0.51; 0.50; 2.45; 1.24; 0.77;
£6.96

Pages 24–25

1a

+	5	8	9
-	3	4	6
Answer	2	4	3

b

+	1	4	3
-		3	2
Answer	1	7	5 <i>cm</i>

c

+	1	¹ 1	7
-		5	8
Answer	1	7	5 <i>mm</i>

d

+	£	3	9
-	£	1	7
Answer	£	2	2

e

+	£	1	² 12
-	£		8 4
Answer	£		4 8

f

+	£		9 2
-	£		3 4
Answer	£	1	2 6

g

+	£	¹ 15	¹ 3
-	£	1	8 9
Answer	£		7 4

h

+	⁶ 13	<i>mm</i>
-	3	6 <i>mm</i>
Answer	3	7 <i>mm</i>

1i Answers will vary.

2a $5,576 + 3,940 = 9,516$

b $6,955 - 6,649 = 306$

Page 26

What to do

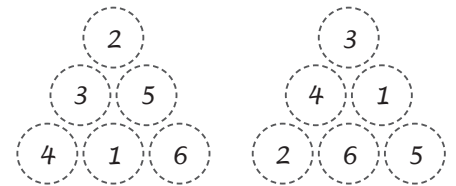
Answers will vary.

Page 27

What to do

Puzzle 1

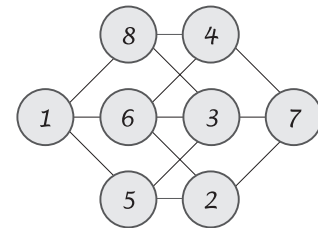
Two possibilities are:



Puzzle 2

Answers will vary.

Sample answer:



Page 28

1a 23, 29, 35

b 70, 60, 50

c 16, 32, 64

2a

14	21	28	35	42	49
----	----	----	----	----	----

Rule $\underline{\quad\quad\quad} + 7$

b

17	37	57	77	97	117
----	----	----	----	----	-----

Rule $\underline{\quad\quad\quad} + 20$

c

75	60	45	30	15	0
----	----	----	----	----	---

Rule $\underline{\quad\quad\quad} - 15$

Series F – Addition and Subtraction

Page 28

2d

8	16	24	32	40	48
---	----	----	----	----	----

Rule _____ + 8

e

63	54	45	36	27	18
----	----	----	----	----	----

Rule _____ - 9

f

63	56	49	42	35	28
----	----	----	----	----	----

Rule _____ - 7

3a

→ + 1	20	21	22	23
↓ + 10	30	31	32	33
	40	41	42	43
	50	51	52	53

b

→ + 1	64	65	66	67
↓ + 10	74	75	76	77
	84	85	86	87
	94	95	96	97

c

→ + 2	3	5	7	9
↓ + 10	13	15	17	19
	23	25	27	29
	33	35	37	39

Page 29

1a RULE: + 50

b RULE: + 200

2a OUT: 685; 900; 38

b OUT: 715; 114; 437

3a IN: 381; 500; 242

b IN: 650; 348; 199

Page 30

1 £32, £37, £42, £47

2 £3.20, £3.35, £3.50, £3.90

3 20 minutes, 18 minutes, 15 minutes, 14 minutes

Pages 31–32

1a 4

b 3

2a 6

b 18

c 30

d 10

e 9

f 11

3a >

b <

4a (102–749)

b <; (491–961)

c >; (0–8)

d <; (57+)

Pages 33–34

1a 4; 4; 4

b 12; 12; 12

c 15; 15; 15

2a 3

b 6

c 7

3a 9; 4

b 5; 12

4a 25; 40

b 6; 18

5a 4; 96; 92

b 30; 5; 25

c 9; 11; 8

Pages 35–36

1a $\bigcirc + 450 = 900$

$\bigcirc + 450 - \underline{450} = 900 - \underline{450}$

$\bigcirc = \underline{450}$

b $\star - 750 = 820$

$\star - 750 + \underline{750} = 820 - \underline{750}$

$\star = \underline{70}$

c $\triangle + 492 = 743$

$\triangle + 492 - \underline{492} = 743 - \underline{492}$

$\triangle = \underline{251}$

d $\diamond - 755 = 435$

$\diamond - 755 + \underline{755} = 435 + \underline{755}$

$\diamond = \underline{1,190}$

2a $\text{😊} + 640 = 982$

$\text{😊} = 982 - \underline{640}$

$\text{😊} = \underline{322}$

b $\text{😊} - 627 = 255$

$\text{😊} = 255 + \underline{627}$

$\text{😊} = \underline{822}$

3a $\bigcirc + 704 = 853$

$\bigcirc = 853 - 704$

$\bigcirc = 149$

b $\bigcirc - 956 = 102$

$\bigcirc = 102 + 956$

$\bigcirc = 1,058$

Series F – Addition and Subtraction

Pages 35–36

4a $23 = 56 - \blacktriangle$

$$\begin{aligned} \boxed{23} + \blacktriangle &= \boxed{56} \\ \blacktriangle &= \boxed{56} - \boxed{23} \\ \blacktriangle &= \boxed{33} \end{aligned}$$

b $32 = 78 - \blacktriangle$

$$\begin{aligned} \boxed{32} + \blacktriangle &= \boxed{78} \\ \blacktriangle &= \boxed{78} - \boxed{32} \\ \blacktriangle &= \boxed{46} \end{aligned}$$

c $36 = 112 - \blacktriangle$

$$\begin{aligned} \boxed{36} + \blacktriangle &= \boxed{112} \\ \blacktriangle &= \boxed{112} - \boxed{36} \\ \blacktriangle &= \boxed{76} \end{aligned}$$

d $52 = 105 - \blacktriangle$

$$\begin{aligned} \boxed{52} + \blacktriangle &= \boxed{105} \\ \blacktriangle &= \boxed{105} - \boxed{52} \\ \blacktriangle &= \boxed{53} \end{aligned}$$

e $26 = 78 - \blacktriangle$

$$\begin{aligned} 26 + \blacktriangle &= 78 \\ \blacktriangle &= 78 - 26 \\ \blacktriangle &= 52 \end{aligned}$$

f $14 = 92 - \blacktriangle$

$$\begin{aligned} 14 + \blacktriangle &= 92 \\ \blacktriangle &= 92 - 14 \\ \blacktriangle &= 78 \end{aligned}$$

Page 37

1a $\triangle - 70 m = 38 m$

$$\begin{aligned} \triangle &= 38 m + 70 m \\ \triangle &= 108 m \end{aligned}$$

b $£50 + \triangle = £130$

$$\begin{aligned} \triangle &= £130 - £50 \\ \triangle &= £80 \end{aligned}$$

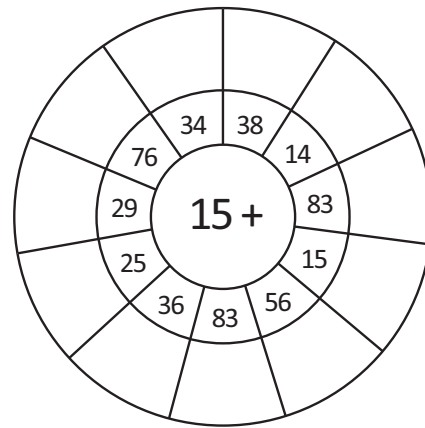
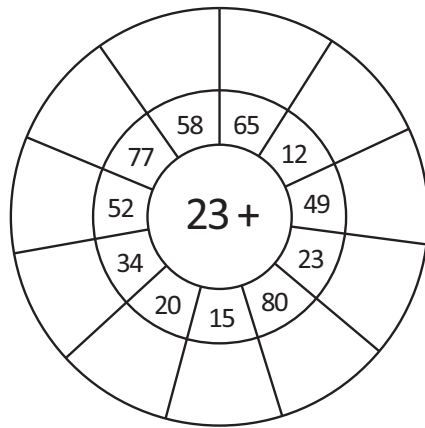
c $£83 + £100 + \triangle = £300$

$$\begin{aligned} \triangle &= £300 - £83 - £100 \\ \triangle &= £117 \end{aligned}$$

Addition mental strategies

Name _____

1 Complete these addition wheels.



2 Show how you would solve $135 + 87$ using:

Jump strategy

Split strategy

Compensation strategy

Skills	Not yet	Kind of	Got it
<ul style="list-style-type: none"> Calculates basic addition facts 			
<ul style="list-style-type: none"> Demonstrates mental addition strategies for: Jump <input type="checkbox"/> Split <input type="checkbox"/> Compensation <input type="checkbox"/> 			

Subtraction mental strategies Name _____

1 Complete this subtraction grid:

	82	34	76	93	100	37	53
- 18							

2 Show how you would solve $461 - 66$ using:

Jump strategy

Split strategy

Compensation strategy

Skills	Not yet	Kind of	Got it
• Calculates basic subtraction facts			
• Demonstrates mental subtraction strategies for: Jump <input type="checkbox"/> Split <input type="checkbox"/> Compensation <input type="checkbox"/>			

1 Complete these algorithms. Write an estimate for each:

a

e:				
	H	T	O	
	5	6	7	
+	2	7	6	

b

e:				
	Th	H	T	O
	4	3	5	2
-		3	4	7

c

e:				
	Th	H	T	O
	1	5	6	4
+		2	7	6

d

e:						
	T	Th	Th	H	T	O
	2	6	8	3	5	
-		5	7	4	8	

e

e:						
	T	Th	Th	H	T	O
	4	9	5	9	4	
+	7	4	1	4	3	

f

e:								
	H	Th	T	Th	Th	H	T	O
	8	5	7	7	2	7		
-	6	4	6	9	7	8		

g

e:					
	H	T	O	t	h
		6	3	•	2 8
+		4	6	•	0 3

h

e:				
	T	O	t	h
	5	6	•	2
-	2	5	•	1 6

i

e:					
	T	O	t	h	
			9	•	5 4
+			4	•	3 4

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			

Word problems using addition and subtraction

Name _____

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

<p>a Max is reading an exciting book that is 126 pages long. If he has read 48 pages, how many does he have left to read?</p>	<p>My estimate:</p> <p>My working out:</p>
<p>What do I need to find out?</p>	
<p>b Baz is training for a fun run. On Monday he ran 12 km, Thursday 19 km and on the weekend he ran 22 km. How far did he run altogether?</p>	<p>My estimate:</p> <p>My working out:</p>
<p>What do I need to find out?</p>	
<p>c Bella went to the shops and bought a magazine for £4.75 and a drink for £2.10. How much change does she get back from £10?</p>	<p>My estimate:</p> <p>My working out:</p>
<p>What do I need to find out?</p>	

Skills	Not yet	Kind of	Got it
<ul style="list-style-type: none"> Solves addition and subtraction problems using own strategy or written method 			
<ul style="list-style-type: none"> Identifies the question 			
<ul style="list-style-type: none"> Provides a reasonable estimate 			

1 Figure out the missing numbers in each pattern and write the rule in words.

a 17 24 38

Rule _____

b 9 42 53

Rule _____

c 1 9 25 33

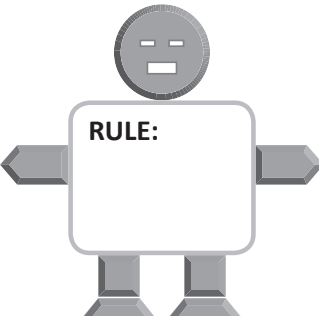
Rule _____

d 28 23 18

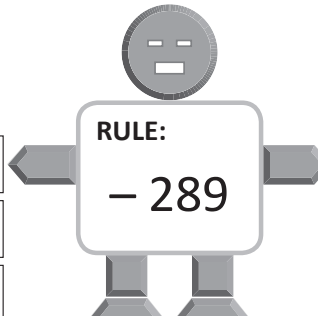
Rule _____

2 Look carefully at the numbers going *in* these function machines and the numbers coming *out*. What rule, then work out which numbers will come out.

a

IN		OUT
527		638
346		457
114		225

b

IN		OUT
527		<input type="text"/>
979		<input type="text"/>
351		<input type="text"/>

3 Complete the function table for the total cost of lunch at a school canteen. Pupils pay £2.00 for a sandwich and then choose what else they would like. Work out the total cost of lunch for each option.

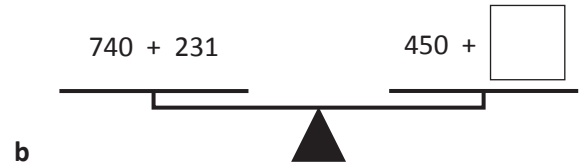
Lunch option	Drink: 80 pence	Fruit: 95 pence	Yoghurt: £1.10	Ice lolly: £1.50
Total cost of lunch				
Rule	Lunch option + £2.00 = Total cost of lunch			

Skills	Not yet	Kind of	Got it
• Completes recursive number pattern and writes the rule			
• Works with input and output relationships and rules			
• Can write a rule to describe input and output relationships			

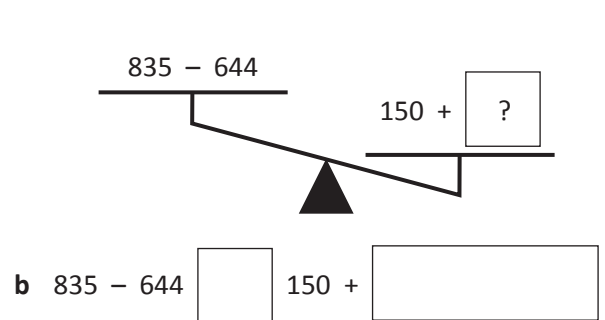
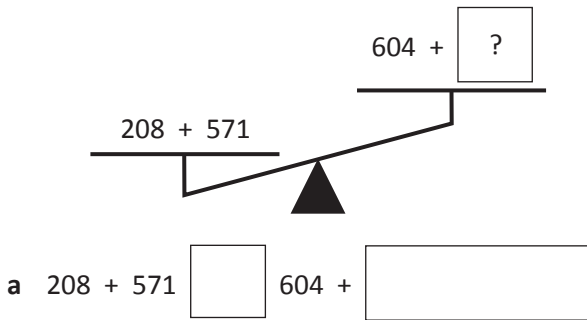
Patterns and algebra

Name _____

4 Complete the equations on these balanced scales.



5 Complete the equations on these un-balanced scales.



6 Find the value of the symbol.

a $\star + 942 = 1,386$

b $\triangle - 433 = 270$

c $\circ - 849 = 52$

d $\diamond + 279 = 514$

Skills	Not yet	Kind of	Got it
• Recognises that the equals sign means equivalence between number sets			
• Finds the value of an unknown represented by a symbol by recognising that identical symbols stand for the same number			

Series F – Addition and Subtraction – Student Progress Record

Name _____ Class _____ Date _____

What went well: _____

What I need to improve: _____



Series F – Addition and Subtraction – Student Progress Record

Name _____ Class _____ Date _____

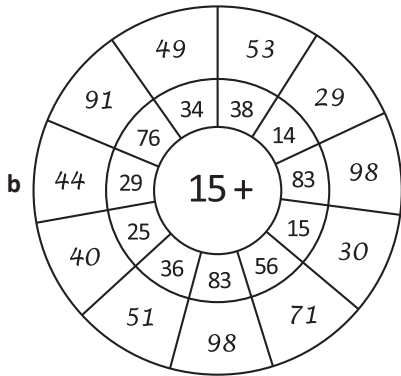
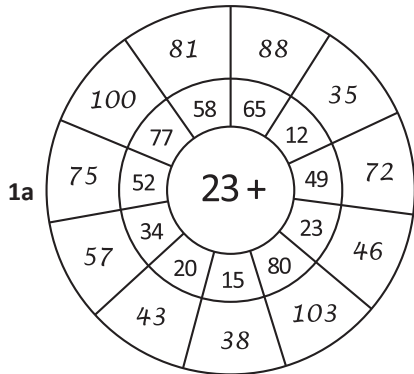
What went well: _____

What I need to improve: _____

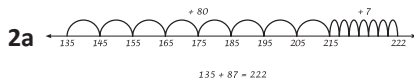
Series F – Addition and Subtraction

ASSESSMENT ANSWERS

Page 1



Page 2



b $135 + 87$
 $\rightarrow 135 + 80 = 215$
 $215 + 7 = 222$
 $135 + 87 = 222$

c $135 + 87$
 $\rightarrow 135 + 90 - 3$
 $= 225 - 3$
 $= 222$
 $135 + 87 = 222$

Page 3

e: 800

1a

	H	T	O
	5	6	7
+	2	7	6
	8	4	3
	1	1	

e: 4,000

b

	Th	H	T	O
	4	13	45	12
-		3	4	7
	4	0	0	5

e: 1,800

c

	Th	H	T	O
	1	5	6	4
+		2	7	6
	1	8	4	0
		1	1	

e: 21,100

d

	TTh	Th	H	T	O
	2	6	78	123	15
-		5	7	4	8
	2	1	0	8	7

e: 123,700

e

	TTh	Th	H	T	O
	4	9	5	9	4
+	7	4	1	4	3
	1	2	3	7	3
		1		1	

e: 210,700

f

	HTh	TTh	Th	H	T	O
	8	5	67	167	112	17
-	6	4	6	9	7	8
	2	1	0	7	4	9

e: 110

g

	H	T	O	t	h
		6	3	2	8
+		4	6	0	3
	1	0	9	3	1
				1	

e: 30

h

	T	O	t	h
	5	6	12	10
-	2	5	1	6
	3	1	0	4

e: 13

i

	T	O	t	h
		9	5	4
+		4	3	4
	1	3	8	8

Page 4

1a The pages left to read.;

76;

$126 - 48$

$= 126 - 50 + 2$

$= 78$

Max has 78 pages left to read.

b Total distance.;

50 km;

1 2

1 9

+ 2 2

5 3

1

Baz ran 53 km altogether.

Series F – Addition and Subtraction


Page 4


1c The change Bella should get.;


$$\begin{aligned} & \text{£}3; \\ & \text{£}4.75 + \text{£}2.10 \\ & = \text{£}6.85 \end{aligned}$$

$$\begin{aligned} & \text{£}10 - \text{£}6.85 \\ & = \text{£}4 - 85\text{p} \\ & = \text{£}3.15 \end{aligned}$$

Bella gets £3.15 change.

6c  = 52 + 849

 = 901

d  = 514 - 279

 = 235

Pages 5–6

1a

10

 17 24

31

 38

45

Rule _____ + 7 _____

b 9

20	31
----	----

 42 53

64

Rule _____ + 11 _____

c 1 9

17

 25 33

41

Rule _____ + 8 _____

d 28 23 18

13	8	3
----	---	---

Rule _____ - 5 _____

2a RULE: + 111

b OUT: 238; 690; 62


3 £2.80; £2.95; £3.10; £3.50

4a 490


b 521

5a >; (0–174)

b <; (42+)

6a  = 1,386 - 942

 = 444

b  = 270 + 433

 = 703

Series F – Addition and Subtraction

Topic	Reference	Strand	Substrand	Objective
Mental Strategies	5C1	Number	Calculation	Add and subtract numbers mentally with increasingly large numbers.
Mental Strategies	5C3	Number	Calculation	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
Written Methods	5C2	Number	Calculation	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
Written Methods	5C4	Number	Calculation	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Patterns and Algebra	5C8b	Number	Calculation	Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.