Mathletics

Series D Teacher

Addition and Subtraction

Series D – Addition and Subtraction

Contents

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Series Author:

Nicola Herringer

Series D – Addition and Subtraction

Page 1

1a

+	2	3	0
6	8	9	6
17	19	20	17
13	15	16	13
12	14	15	12

b

+	3	0	2
9	12	9	11
16	19	16	18
11	14	11	13
14	17	14	16

2a 13

b 11

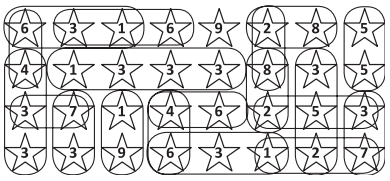
c 15

d 16

e 15

f 11

3



4a 4 + 6 + 5 + 5 + 3 = 23

b 9 + 1 + 3 + 7 + 5 = 25

Page 2

1a 20, 30, 40

b 25, 35, 45

c 17, 27, 37

2a 110, 210, 310

b 115, 215, 315

c 107, 207, 307

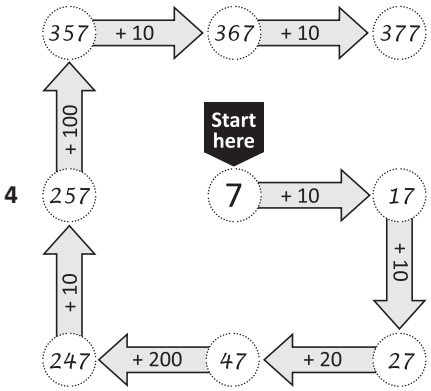
3a 8; 80; 800

b 8; 80; 800

c 5; 50; 500

d 10; 100; 1,000

4



Pages 3–4

1a 5, 10

b 6, 12

c 7, 14

d 4, 8

2 5 + 5 = 10 7 + 7 = 14 9 + 9 = 18

2 + 2 = 4 12 + 12 = 24 8 + 8 = 16

3

2 + 2	5+5	3 + 3	4 + 4	1+1	6+6	7 + 7	8 + 8	9+9
= 4	= 10	=6	=8	= 2	= 12	=14	=16	= 18

4a 20

b 24

c 32

d 28

5b 9

c 13

d 7

e 17

f 15

6a 15

b 11

c 9

d 23

e 29

f 31

7a 25; 23; 26

b 29; 31; 33

c 35; 28; 33

8a SS

b TT

c NN

d FF

Pages 5–7

1a 4, 14

b 1, 11

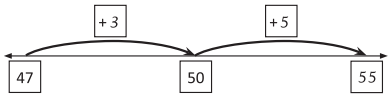
c 4, 14

d 7, 17

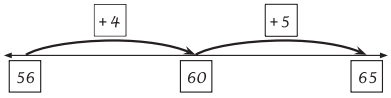
2

	Set 1:	Set 2:
a		20 + 1 = 21
b	10 + 2 = 12	20 + 3 = 23
c	10 + 3 = 13	20 + 5 = 25

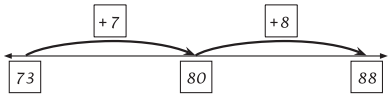
3a 55;



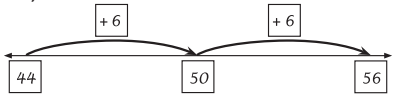
b 65;



c 88;



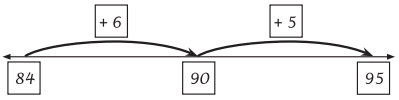
d 56;



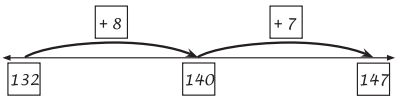
Series D – Addition and Subtraction

Pages 5–7

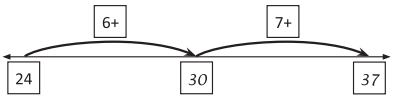
3e 95;



f 47;



4 24 + 13 = 37;



5a 61; 68; 150

b 53; 34; 175

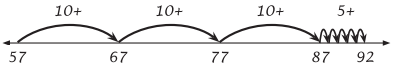
c 90; 61; 172

Page 8

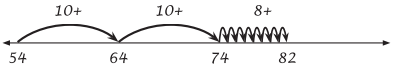
1a 61; 71; 81; 91

b 88; 98; 108; 118

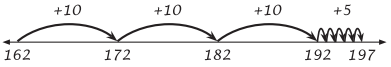
2a 92;



b 82;



c 197;



Page 9

1b 57 = 50 + 7

c 65 = 60 + 5

d 96 = 90 + 6

2

+	10	50	20	30	60
21	31	71	41	51	81
48	58	98	68	78	108

3a 38 + 34 → 30 + 4 → 38 + 30 = 68 → 68 + 4 = 72

b 29 + 28 → 20 + 8 → 29 + 20 = 49 → 49 + 8 = 57

c 75 + 14 → 10 + 4 → 75 + 10 = 85 → 85 + 4 = 89

d 94 + 17 → 10 + 7 → 94 + 10 = 104 → 104 + 7 = 111

Page 10

1a 43 + 56 = (4 tens + 5 tens) + (3 ones + 6 ones)
= 9 tens + 9 ones
= 99

b 35 + 24 = (3 tens + 2 tens) + (5 ones + 4 ones)
= 5 tens + 9 ones
= 59

c 78 + 11 = (7 tens + 1 tens) + (8 ones + 1 ones)
= 8 tens + 9 ones
= 89

d 45 + 24 = (4 tens + 2 tens) + (5 ones + 4 ones)
= 6 tens + 9 ones
= 69

2

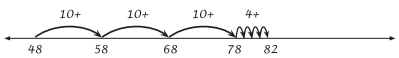
+	65	55	36	23	41
12	77	67	48	35	53
34	99	89	70	57	75

Page 11

1a

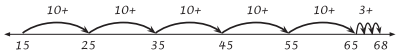
25 + 18 = 43 cups

b



48 + 34 = 82 minutes

c



£15 + £53 = £68

Page 12

What to do

Observe students.

Page 13

What to do

Observe students.

Page 14

Observe students.

Page 15

1a

8		4		12
8	+	4	=	12
4	+	8	=	12
12	–	4	=	8
12	–	8	=	4

b

7		9		16
7	+	9	=	16
9	+	7	=	16
16	–	7	=	9
16	–	9	=	7

Series D – Addition and Subtraction

Page 15

1d

13		7		20
13	+	7	=	20
7	+	13	=	20
20	–	13	=	7
20	–	7	=	13

e

10		8		18
10	+	8	=	18
8	+	10	=	18
18	–	10	=	8
18	–	8	=	10

2 Answers will vary.

Page 16

1

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

a Set 1	b Set 2	c Set 3
6	21	13
16	31	23
26	41	33
36	51	43
46	61	53
56	71	63
66	81	73
76	91	83

2a 81

b 91

c 101

d 111

e 121

f 131

Pages 17–20

1a 7

b 6

c 5

d 7

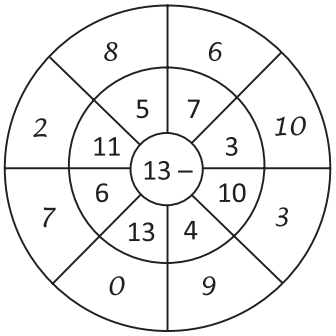
2a 15 – 7 = 8

b 19 – 5 = 14

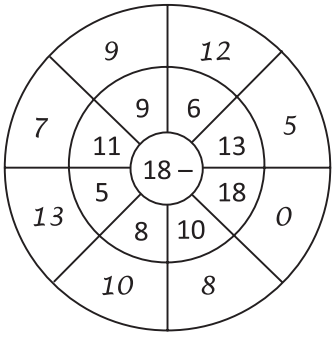
c 16 – 7 = 9

d 19 – 8 = 11

3a



b



4a 16 – 5 = 11

b 17 – 4 = 13

c 19 – 6 = 13

11 + 13 + 13 = 37

50 – 37 = 13

The mystery number is: 13

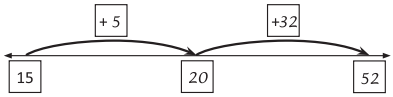
5a

–			
	15	5	10
	8	3	5
	7	2	5

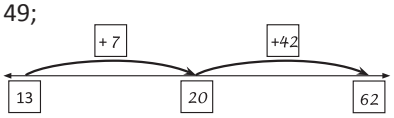
b

–			
	30	18	12
	15	9	6
	15	9	6

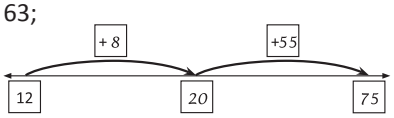
6a 37;



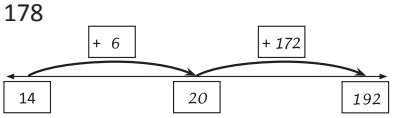
b 49;



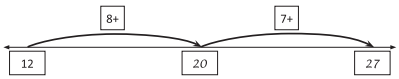
c 63;



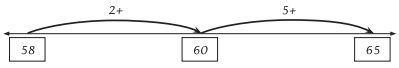
d 178



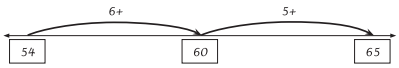
7 27 – 12 = 15;



8b 65 – 58 = 7;



c 65 – 54 = 11;



d Liam's

Pages 21–22

1a 3

b 5

c 7

d 3

e 6

f 4

g 6

h 3

i 5

2a Out: 4; 7; 5; 8

b Out: 3; 5; 7; 4

c Out: 3; 6; 5; 4

d Out: 3; 7; 9; 5

e Out: 7; 4; 3; 5

Series D – Addition and Subtraction

Pages 21–22

3a 2; 4; 9; 5

b 5; 4; 3; 7

c 3; 4; 6; 5

4a 42; 23; 51; 33

b 21; 73; 92; 81

c 85; 54; 45; 25

5a–l Answers will vary.

Pages 23–24

1a 12; 12 – 6 = 6

b 18; 18 – 9 = 9

c 24; 24 – 12 = 12

d 16; 16 – 8 = 8

2 Observe students.

3

+	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	(2)	3	4	5	6	7	8	9	10
2	2	3	(4)	5	6	7	8	9	10	11
3	3	4	5	(6)	7	8	9	10	11	12
4	4	5	6	7	(8)	9	10	11	12	13
5	5	6	7	8	9	(10)	11	12	13	14
6	6	7	8	9	10	11	(12)	13	14	15
7	7	8	9	10	11	12	13	(14)	15	16
8	8	9	10	11	12	13	14	15	(16)	17
9	9	10	11	12	13	14	15	16	17	(18)

See	Think	Answer
17 – 8	(16 – 8) + 1	9
15 – 7	(14 – 7) + 1	8
13 – 6	(12 – 6) + 1	7
11 – 5	(10 – 5) + 1	6
9 – 4	(8 – 4) + 1	5

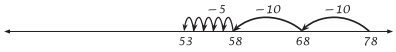
See	Think	Answer
3 – 2	(4 – 2) – 1	1
5 – 3	(6 – 3) – 1	2
7 – 4	(8 – 4) – 1	3
9 – 5	(10 – 5) – 1	4
11 – 6	(12 – 6) – 1	5

4

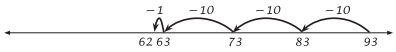
See	Think	Answer
31 – 15	(30 – 15) + 1	16
37 – 18	(36 – 18) + 1	19
51 – 25	(50 – 25) + 1	26
91 – 50	(90 – 50) + 1	41
61 – 30	(60 – 30) + 1	31

Pages 25–26

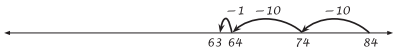
1a 53;



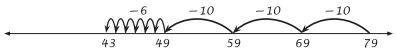
b 62;



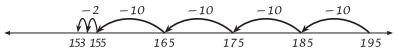
c 63;



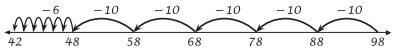
d 43;



e 153;

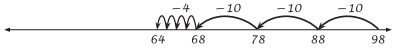


2a



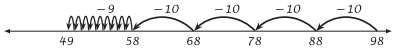
£42

b



£64

c



£49

Pages 27–28

1

–	10	30	20	30	50
96	86	66	76	66	46
71	61	41	51	41	21

2a 73 – 34: 30, 4 → 73 – 30 = 43 → 43 – 4 = 39

b 96 – 65: 60, 5 → 96 – 60 = 36 → 36 – 5 = 31

c 81 – 24: 20, 4 → 81 – 20 = 61 → 61 – 4 = 57

d 69 – 23: 20, 3 → 69 – 20 = 49 → 49 – 3 = 46

e 96 – 43: 40, 3 → 96 – 40 = 56 → 56 – 3 = 53

3

1 3	2	■	2 2	■	3 5	4 7
■	■	5 8	1	■	■	2
■	6 5	2	■	7 6	4	■
8 5	3	■	9 3	■	10 2	11 5
6	■	12 4	8	■	■	9
■	13 3	■	■	14 3	15 6	■
■	16 5	2	■	■	17 4	3

Across

1 32
3 57
5 81
6 52
7 64
8 53
10 25
12 48
14 36
16 52
17 43

Down

2 21
4 72
5 82
6 53
8 56
9 38
11 59
13 35
15 64

Page 29

What to do

Observe students.

Page 30

What to do

Observe students.

Series D – Addition and Subtraction

Pages 31–33

1a 55 + 23 = (5 tens + 2 tens) + (5 ones + 3 ones)

= 7 tens + 8 ones

= 78

	tens	ones
	5	5
+	2	3
	7	8

b 42 + 35 = (4 tens + 3 tens) + (2 ones + 5 ones)

= 7 tens + 7 ones

= 77

	tens	ones
	4	2
+	3	5
	7	7

c 61 + 18 = (6 tens + 1 tens) + (1 ones + 8 ones)

= 7 tens + 9 ones

= 79

	tens	ones
	6	1
+	1	8
	7	9

d 65 + 32 = (6 tens + 3 tens) + (5 ones + 2 ones)

= 9 tens + 7 ones

= 97

	tens	ones
	6	5
+	3	2
	9	7

2a 75

b 59

c 88

d 69

e 47

f 98

3a 77

b 98

c 88

4a

	tens	ones
	2	3
	3	2
+	4	1
	9	6

b

	tens	ones
	4	3
	2	3
+	1	2
	7	8

c

	tens	ones
	2	1
	3	2
+	4	5
	9	8

5a

	hundreds	tens	ones
	1	4	2
+		3	6
	1	7	8

b

	hundreds	tens	ones
	2	0	7
+		8	2
	2	8	9

c

	hundreds	tens	ones
	7	1	6
+		7	3
	7	8	9

5d

	hundreds	tens	ones
	5	5	5
+		4	1
	5	9	6

e

	hundreds	tens	ones
	1	4	7
+	1	5	2
	2	9	9

f

	hundreds	tens	ones
	4	3	8
+			
	7	8	9

6a

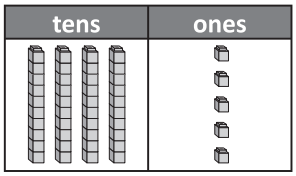
	hundreds	tens	ones
	2	1	4
+	1	5	3
	3	6	7

b

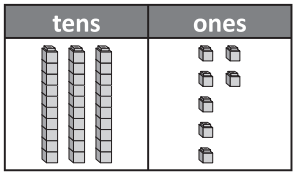
	hundreds	tens	ones
	3	1	4
+	5	6	1
	8	7	5

Pages 34–36

1a 4 tens rods, 5 ones cubes



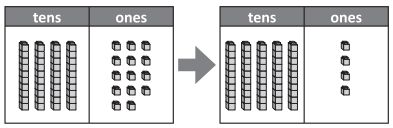
b 3 tens rods, 7 ones cubes



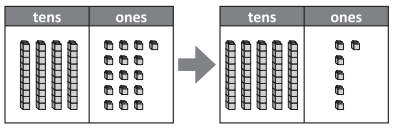
Series D – Addition and Subtraction

Pages 34–37

2a 26 + 28 = 54;
5 tens rods, 4 ones cubes



b 37 + 19 = 56;
5 tens rods, 6 ones cubes



3a e: 70

	tens	ones
	3	8
+	2	9
	6	7
	1	

b e: 80

	tens	ones
	4	9
+	2	7
	7	6
	1	

c e: 80

	tens	ones
	2	9
+	4	9
	7	8
	1	

d e: 60

	tens	ones
	4	4
+	1	7
	6	1
	1	

3e e: 90

	tens	ones
	4	9
+	4	3
	9	2
	1	

f e: 80

	tens	ones
	1	9
+	6	2
	8	1
	1	

g e: 70

	tens	ones
	4	8
+	1	8
	6	6
	1	

h e: 70

	tens	ones
	3	8
+	2	9
	6	7
	1	

i e: 80

	tens	ones
	1	9
+	5	9
	7	8
	1	

4a e: 100

	tens	ones
	3	9
+	5	8
	9	7
	1	

b e: 80

	tens	ones
	1	9
+	5	9
	7	8
	1	

5a e: 180

	hundreds	tens	ones
	1	4	6
+		3	5
	1	8	1
	1		

b e: 290

	hundreds	tens	ones
	2	3	7
+		5	5
	2	9	2
	1		

c e: 525

	hundreds	tens	ones
	4	7	5
+		4	8
	5	2	3
	1	1	

d e: 820

	hundreds	tens	ones
	7	9	2
+		2	9
	8	2	1
	1	1	

Series D – Addition and Subtraction

Pages 34–37

5e e: 630

	hundreds	tens	ones
	3	8	3
+	2	4	7
	6	3	0
	1	1	

f e: 810

	hundreds	tens	ones
	5	1	4
+	2	9	9
	8	1	3
	1	1	

g e: 1,080

	thousands	hundreds	tens	ones
		6	7	5
		3	4	3
+			6	6
	1	0	8	4
	1	1	1	

h e: 1,280

	thousands	hundreds	tens	ones
		7	5	8
		4	7	6
+			4	9
	1	2	8	3
	1	1	2	

Page 38

1a 31

b 44

c 24

d 16

e 46

f 33

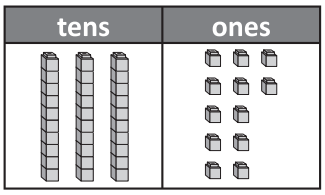
g 111

h 342

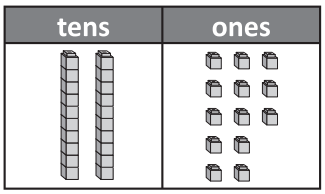
i 541

Pages 39–42

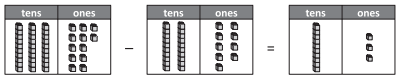
1a 3 tens rods, 12 ones cubes



b 2 tens rods, 13 ones cubes



2 3 tens rods, 12 ones cubes



1 tens rod, 3 ones cubes

3a e: 40

	tens	ones
	~~6~~ 7	1 2
–	2	8
	4	4

b e: 10

	tens	ones
	~~4~~ 5	1 2
–	4	3
		9

c e: 30

	tens	ones
	~~5~~ 6	1 1
–	3	4
	2	7

3d e: 40

	tens	ones
	~~4~~ 5	1 6
–	1	8
	3	8

e e: 30

	tens	ones
	~~5~~ 6	1 2
–	3	3
	2	9

f e: 70

	tens	ones
	~~8~~ 9	1 6
–	2	8
	6	8

g e: 20

	tens	ones
	~~3~~ 4	1 1
–	2	4
	1	7

h e: 40

	tens	ones
	~~6~~ 7	1 6
–	3	9
	3	7

Series D – Addition and Subtraction

Pages 39–42

3i e: 30

	tens	ones
	8 ~~9~~	1 7
–	6	8
	2	9

4a 6

b 4

c 5

5a e: 140

	hundreds	tens	ones
	1	6 ~~7~~	1 4
–		3	5
	1	3	9

b e: 390

	hundreds	tens	ones
	3 ~~4~~	1 8	6
–		9	4
	3	9	2

c e: 160

	hundreds	tens	ones
	1 ~~2~~	12 ~~3~~	1 2
–		6	7
	1	6	5

d e: 180

	hundreds	tens	ones
	2 ~~3~~	13 ~~4~~	1 5
–	1	6	8
	1	7	7

5e e: 80

	hundreds	tens	ones
	5 ~~6~~	14 ~~5~~	1 3
–	5	7	7
		7	6

f e: 290

	hundreds	tens	ones
	8 ~~9~~	11 ~~2~~	1 0
–	6	2	9
	2	9	1

6a 7

b 2

Page 43

What to do

Observe students.

Pages 44–46

1 £2; £1; 50p; 20p; 10p; 5p

2a £3

b £2

c £11

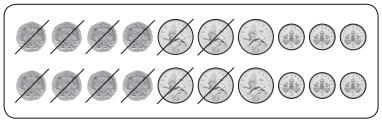
d £10

3 Answers will vary.

4a

£1

b

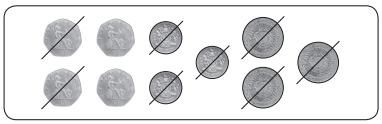


50p

c

£3.40

4d



£1

5a–e Answers will vary.

6 Answers will vary.

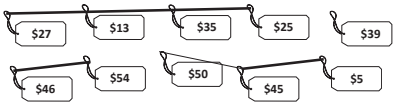
Page 47

1a £90

b £160

c £135

2



Page 48

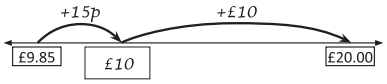
1a +25p

b +75p

c +40p

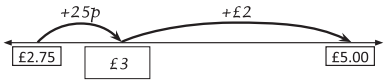
d +65p

2a



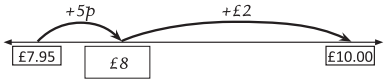
Change is: £10.15

b



Change is: £2.25

c



Change is: £2.05

Page 49

1a £15.25 + £24.75
= (£15 + £24) + (25p + 75p)
= £39 + £1
= £40

b £15.25 + £12.80
= (£15 + £12) + (25p + 80p)
= £27 + £1.05
= £28.05

Series D – Addition and Subtraction

Page 49

1c Sunday's profit
£24.75 + £36.20
= (£24 + £36) + (75p + 20p)
= £60 + 95p
= £60.95

Add this to £28.05 (Saturday's profit)
£60.95 + £28.05
= (£60 + £28) + (95p + 5p)
= £88 + £1 = £89

Pages 50–51

What to do

Observe students.

Pages 52–53

1a 9, 11, 13, 15

b 16, 20, 24, 28, 32

c 35, 30, 25, 20

2a 11, 21, 31, 41, 51, 61, 71, 81

b 55, 60, 65, 70, 75, 80, 85, 90

c 40, 32, 32, 28, 24, 20, 16, 12

3a 14, 17, 20, 23, 26; + 3

b 28, 35, 42, 49, 56; + 7

c 45, 36, 27, 18, 9; – 9

4a

	75	90	105	120
	60	225	210	135
	45	240	195	150
15	30	255	180	165

b

	45	54	63	72
	36	135	126	81
	27	144	117	90
9	18	153	108	99

5a

12	50	88	126	164	(204)	(242)	(280)
					202	240	278

b

84	77	70	63	56	(50)	(43)	(36)
					49	42	35

c

17	59	101	143	185	(229)	(271)	(313)
					227	269	311

6a–c Answers will vary.

Page 54

1a 25

b 13

2a – 19

b + 25

3a 19

b 67

4a, b Answers will vary.

Pages 55–56

1a 10; 6 + 4 = 10

b 12; 6 + 6 = 12

2a 4 + 4 = 8

b 5 + 5 = 10

3 Answer will vary.

4a 30

b 70

c 25

d 70

5b <40

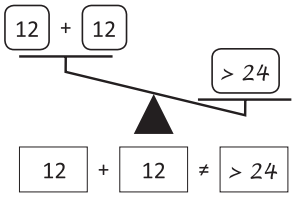
c >90

d >70

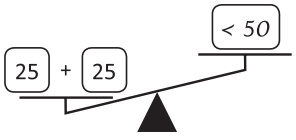
e <34

Pages 57–58

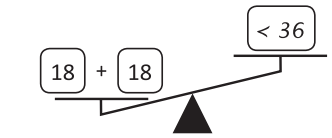
1 Answers will vary.
Possible answers:



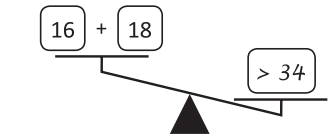
a 12 + 12 ≠ > 24



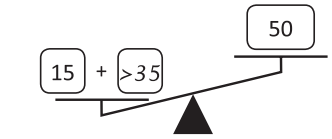
b 25 + 25 ≠ < 50



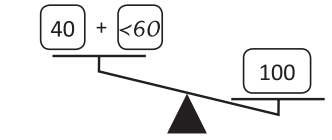
1c 18 + 18 ≠ < 36



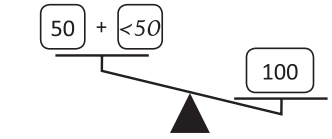
d 16 + 18 ≠ > 34



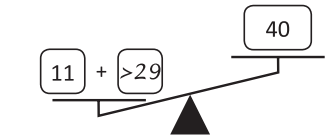
e 15 + > 35 ≠ 50



f 40 + < 60 ≠ 100



g 50 + < 50 ≠ 100



h 11 + > 29 ≠ 40

2a–f Answers will vary.

3 Answers will vary.
Possible answers:

a 7 + 3 = 10

b 7 + 3 ≠ 16

c 16 + 4 = 20

d 4 + 7 ≠ 10

4a–g Answers will vary.

Addition mental strategies

Name _____

1 Complete these addition grids:

a

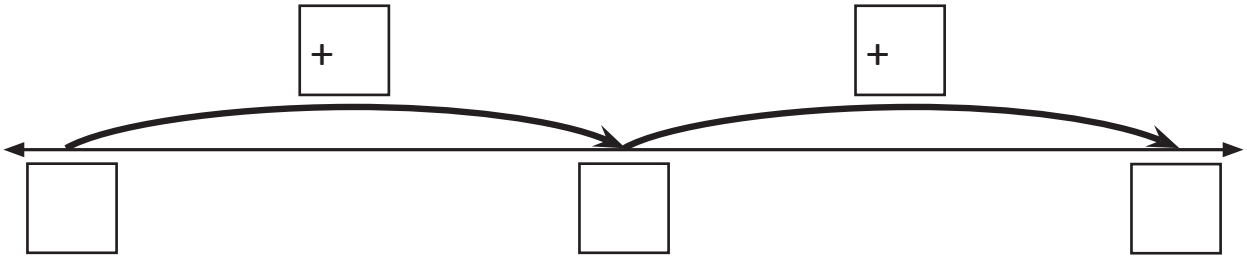
+	8	3	9	10
52				
17				
13				

b

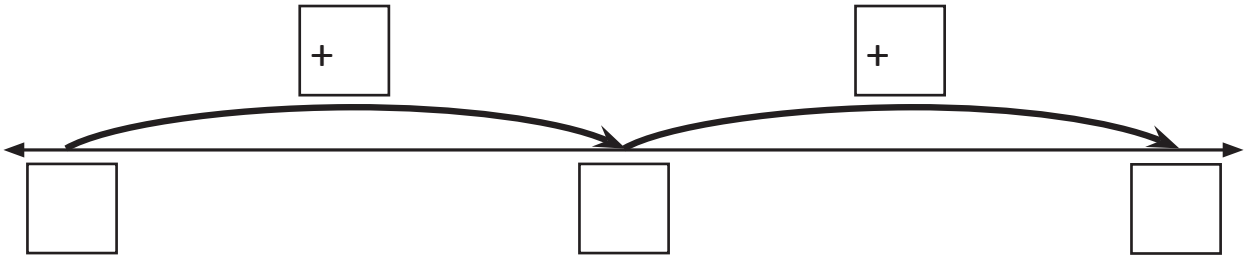
+	4	8	2	5
72				
25				
61				

2 Show how to use bridge to ten to add these:

a 48 + 13 = ☐



b 156 + 16 = ☐



Skills	Not yet	Kind of	Got it
• Recalls addition facts 2-digit plus 1 digit to 99			
• Uses mental strategies to solve addition or subtraction problems: bridge to ten			

Addition mental strategies

Name _____

3 **Add these using the jump strategy:**

a 28 + 22 = ☐

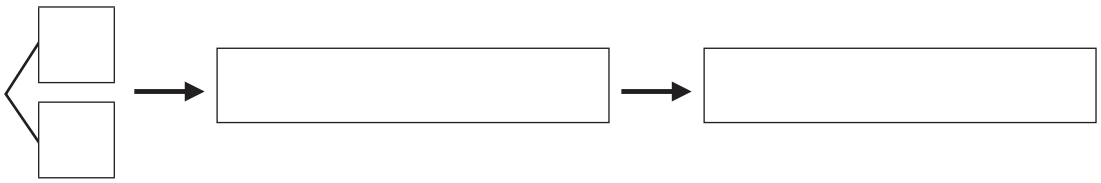
b 252 + 31 = ☐

4 **Add these using both methods of the split strategy:**

a 34 + 25 = (☐ tens + ☐ tens) + (☐ ones + ☐ ones)

= ☐ tens + ☐ ones

= ☐

b 42 + 37 

Skills	Not yet	Kind of	Got it
• Uses mental strategies to solve addition or subtraction problems: the jump and the split strategy			

Addition mental strategies

Name _____

5 **Solve one word problem with the jump strategy and one with the split strategy (either method).**

a Holly and Tom went on a mini-beast hunt. Holly counted 38 ladybirds and Tom counted 17 snails. How many mini-beasts did they see altogether?

b Harry saved £35 in June and £27 in July. How much did he save altogether?

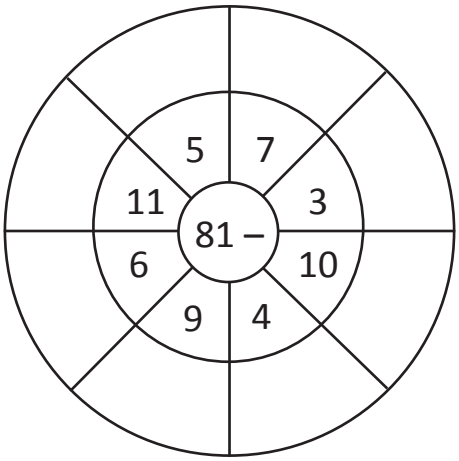
c Which strategy do you like best and why?

Skills	Not yet	Kind of	Got it
• Uses the jump and the split strategy to solve word problems			
• Reflects upon their own thinking with mental addition strategies			

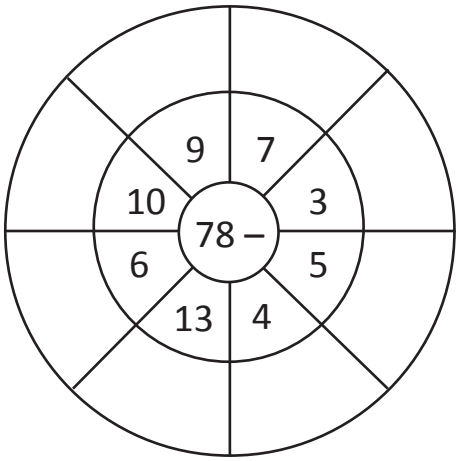
Subtraction mental strategies Name _____

1 Complete these subtraction wheels:

a

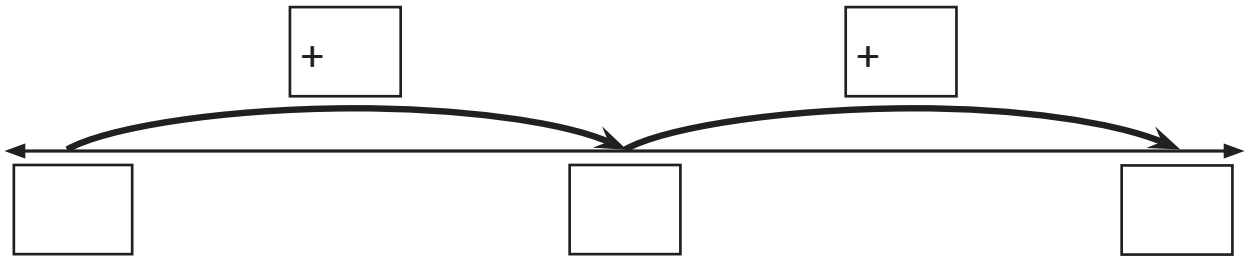


b

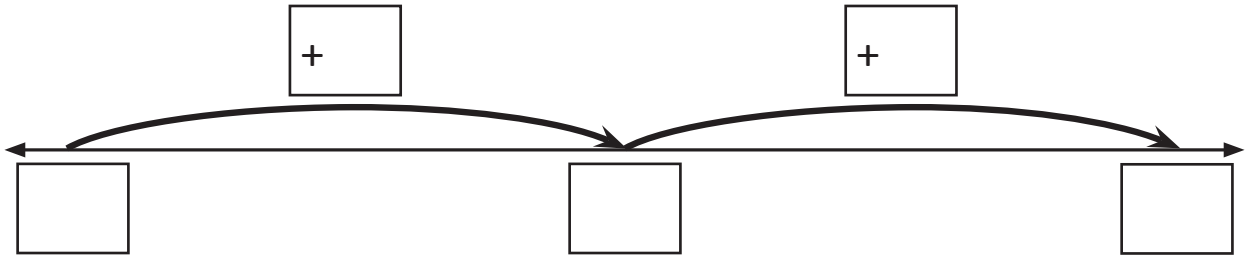


2 Show how to use bridge to ten to subtract these:

a 73 – 15 = ☐



b 146 – 17 = ☐



Skills	Not yet	Kind of	Got it
• Recalls subtraction facts 2-digit subtract 1 digit to 999			
• Uses mental strategies to solve addition or subtraction problems: bridge to ten			

Subtraction mental strategies Name _____

3 **Subtract these using the jump strategy:**

a 79 – 27 = ☐

b 184 – 31 = ☐

4 **Subtract these using the split strategy:**

a 79 – 25 ☐ ☐ → ☐ → ☐

b 95 – 32 ☐ ☐ → ☐ → ☐

Skills	Not yet	Kind of	Got it
• Uses mental strategies to solve addition or subtraction problems: the jump and the split strategy			

Written methods

Name _____

1 **Add these using the written method:**

a

	tens	ones
	4	4
+	2	5

b

	tens	ones
	3	0
+	4	9

c

	tens	ones
	7	2
+	3	2

d

	tens	ones
	8	4
+	3	5

e

	hundreds	tens	ones
	1	4	6
+	1	3	2

f

	hundreds	tens	ones
	3	5	3
+	4	4	4

2 **Add these using the written method. Estimate the answer first:**

a e: _____

	tens	ones
	6	3
+	1	8

b e: _____

	hundreds	tens	ones
	2	5	8
+		4	8

c e: _____

	hundreds	tens	ones
	1	6	6
+	5	7	9

Written methods

Name _____

3 Subtract these using the written method:

a

	tens	ones
	8	4
–	3	2

b

	tens	ones
	9	5
–	6	2

c

	tens	ones
	4	5
–	2	2

d

	tens	ones
	6	3
–	1	2

e

	hundreds	tens	ones
	2	8	7
–	1	4	2

f

	hundreds	tens	ones
	8	6	5
–	6	1	5

4 Subtract using the written method. Estimate the answer first:

a e: _____

	tens	ones
	6	8
–	1	9

b e: _____

	hundreds	tens	ones
	1	6	4
–		7	7

c e: _____

	hundreds	tens	ones
	4	2	3
–	1	5	6

Skills	Not yet	Kind of	Got it
• Uses written methods to subtract 2-digit numbers including exchanging			

Money

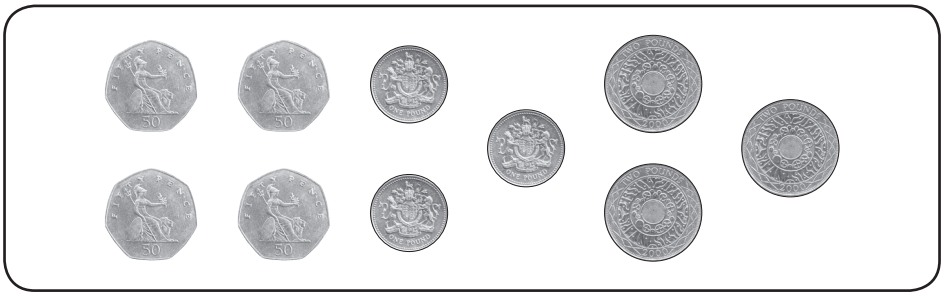
Name _____

1 **Circle the coins you would need to make each amount. How much is left over each time?**

a Make £2:

Amount left over ☐

b Make £10:



Amount left over ☐

2 **Bridge to the next pound on these number lines to find the change:**

a

Change is ☐

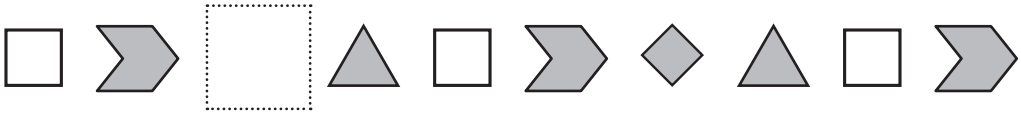
b

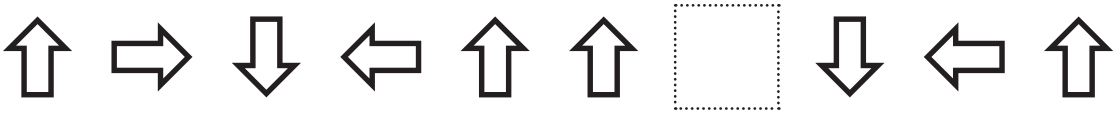
Change is ☐

Skills	Not yet	Kind of	Got it
• Represents money values in multiple ways using coins and notes or just coins			
• Calculates the change from whole pound amounts			

Name _____

1 **Draw the missing shape in these shape patterns:**

a 

b 

2 **Complete these skip counting patterns by filling in the missing numbers.**

a

13			43	53		83

b

32		24	20		8	

3 **Finish each pattern and write the rule:**

a 4, 6, 8, ____, ____, ____, ____, ____ Rule: ____

b 9, 13, 17, ____, ____, ____, ____, ____ Rule: ____

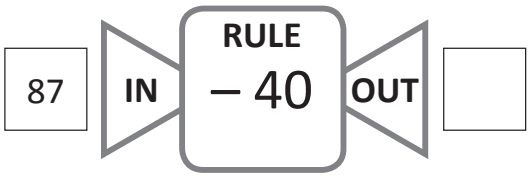
c 70, 65, 60, ____, ____, ____, ____, ____ Rule: ____

Skills	Not yet	Kind of	Got it
• Completes a shape pattern			
• Completes a skip counting pattern			
• Completes a number pattern and write the rule in words			

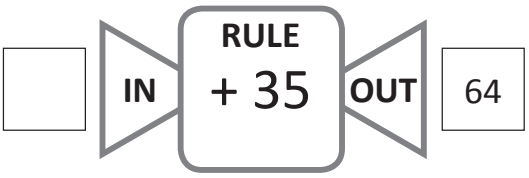
Name _____

4 **Complete these function machines:**

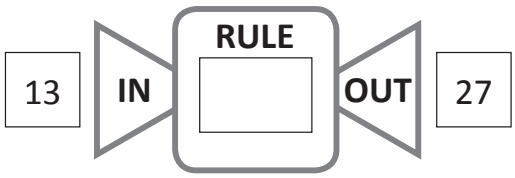
a



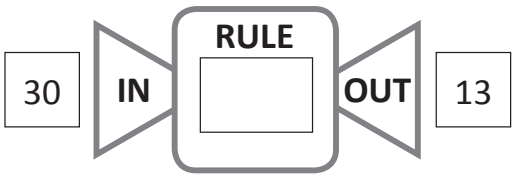
b



c

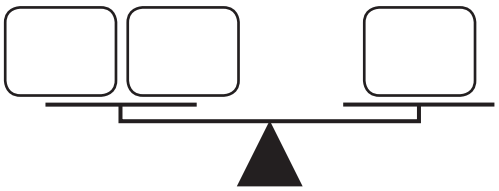


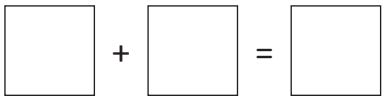
d



5 **Create your own equation and show it on the balanced scales:**

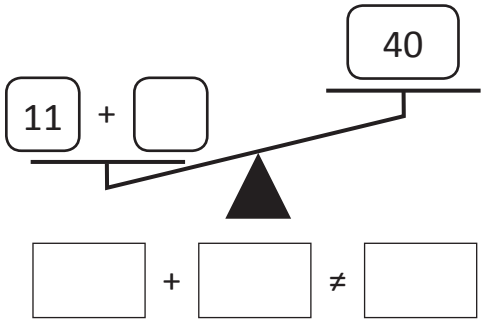
a



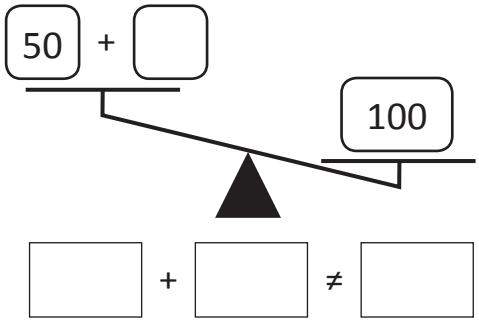


6 **Balance each set of scales by writing a number in the box. Then write the matching equation.**

a



b



Skills	Not yet	Kind of	Got it
• Recognises that equals symbol means equivalence			
• Recognises the not equals to symbol			
• Can match a number statement that uses a symbol for the unknown in a simple story problem			

Series D – Addition and Subtraction – Student Progress Record

Name_____ Class_____ Date _____

What went well: _____

_____

_____

_____

What I need to improve: _____

_____

_____

_____

Series D – Addition and Subtraction – Student Progress Record

Name_____ Class_____ Date _____

What went well: _____

_____

_____

_____

What I need to improve: _____

_____

_____

_____

Series D – Addition and Subtraction

ASSESSMENT ANSWERS

Pages 10–12

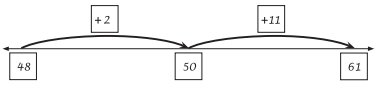
1a

+	8	3	9	10
52	60	55	61	62
17	25	20	26	27
13	21	16	22	23

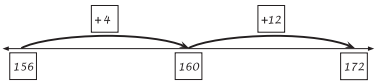
b

+	4	8	2	5
72	76	80	74	77
25	29	33	27	30
61	65	69	63	66

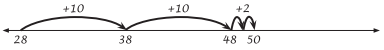
2a 61;



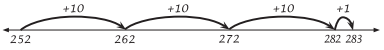
b 172;



3a 50;



b 283;



4a 34 + 25 = (3 tens + 2 tens) + (4 ones + 5 ones)
= 5 tens + 9 ones
= 59

b 42 + 37 → 30, 7 → 42 + 30 = 72 → 72 + 7 = 79

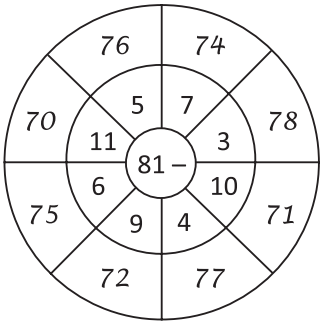
5a 55 mini-beasts
Working will vary.

b £62
Working will vary.

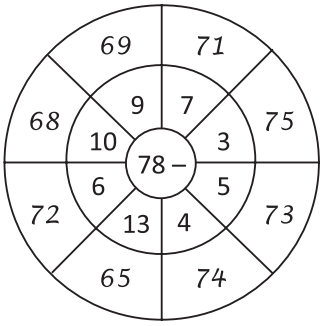
c Answers and workings will vary.

Pages 13–14

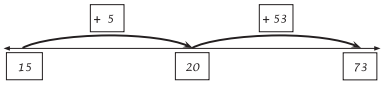
1a



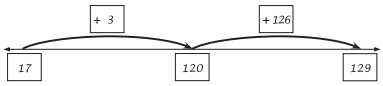
b



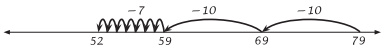
2a 58;



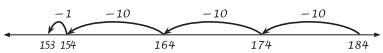
b 129;



3a 52;



b 153;



4a 79 – 25 → 20, 5 → 79 – 20 = 59 → 59 – 5 = 54

b 95 – 32 → 30, 2 → 95 – 30 = 65 → 65 – 2 = 63

Pages 15–16

1a

		tens	ones
		4	4
+		2	5
		6	9

1b

		tens	ones
		3	0
+		4	9
		7	9

c

		tens	ones
		7	2
+		3	2
	1	0	4

d

		tens	ones
		8	4
+		3	5
	1	1	9

e

	hundreds	tens	ones
	1	4	6
+	1	3	2
	2	7	8

f

	hundreds	tens	ones
	3	5	3
+	4	4	4
	7	9	7

2 Estimates may vary.

a e: 80

		tens	ones
		6	3
+		1	8
		8	1

Series D – Addition and Subtraction

Pages 15–16

2b e: 310

	hundreds	tens	ones
	2	5	8
+		4	8
	3	0	6
	1	1	

c e: 750

	hundreds	tens	ones
	1	6	6
+	5	7	9
	7	4	5
	1	1	

3a

	tens	ones
	8	4
–	3	2
	5	2

b

	tens	ones
	9	5
–	6	2
	3	3

c

	tens	ones
	4	5
–	2	2
	2	3

d

	tens	ones
	6	3
–	1	2
	5	1

3e

	hundreds	tens	ones
	2	8	7
–	1	4	2
	1	4	5

f

	hundreds	tens	ones
	8	6	5
–	6	1	5
	2	5	0

4 Estimates may vary.

a e: 50

	tens	ones
	5 ~~6~~	1 8
–	1	9
	4	9

b e: 80

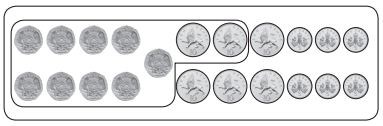
	hundreds	tens	ones
	0 ~~1~~	15 ~~6~~	1 4
–		7	7
		8	7

c e: 270

	hundreds	tens	ones
	3 ~~4~~	11 ~~2~~	1 3
–	1	5	6
	2	6	7

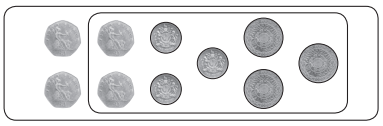
Page 17

1a



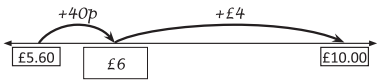
Amount left over 70p

b



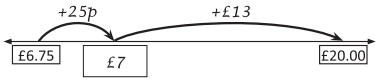
Amount left over £1

2a



Change is £4.40

b



Change is £13.25

Pages 18–19

1a

b

2a 23; 33; 63; 73

b 28; 16; 12; 4

3a 10; 12; 14; 16; 18; Rule: + 2

b 21; 25; 29; 33; 37; Rule: + 4

c 55; 50; 45; 40; 35; Rule: – 5

4a 47

b 29

c + 14

d – 17

5 Answers will vary.

6 Answers will vary.
Sample answers:

a 11 + > 29 ≠ 40
> 40

b 50 + < 50 ≠ 100
< 100

Series D – Addition and Subtraction

Topic	Reference	Strand	Substrand	Objective
Mental Strategies	3C1	Number	Calculation	Add and subtract numbers mentally, including: a 3-digit number and ones, a 3-digit number and tens, a 3-digit number and hundreds.
Written Methods	3C2	Number	Calculation	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
Written Methods	3C3	Number	Calculation	Estimate the answer to a calculation and use inverse operations to check answers.
Mental and Written Methods	3C4	Number	Calculation	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Money	3M9a	Measurement	-	Add and subtract amounts of money to give change, using both £ and p in practical contexts.
Patterns and Algebra	This content has been included for curricula other than the England National Curriculum.			