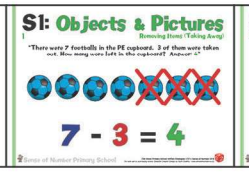
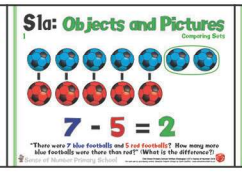
Subtraction Strategies

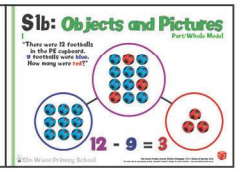
105		Calculation & Vocabulary
107	S1	Objects and Pictures
110	S2	Counting Back
112	S3	Counting On
114	S4	Backwards Bounce
116	S5	Backwards Jump
118	S6	10s Jump, 1s Jump
127	S7	Triple Jump
136	S8	Part/Whole (Minuend)
144	S9	Part/Whole (Subtrahend)
152	S10	Expanded Column
158	S11	Column Subtraction

Subtraction

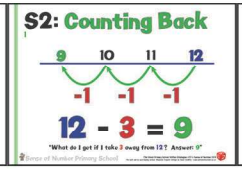
Y1

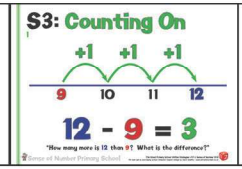


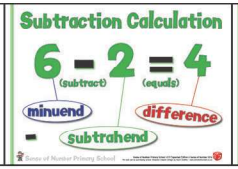


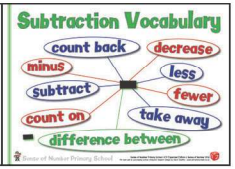


Y1

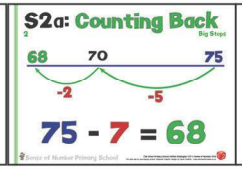


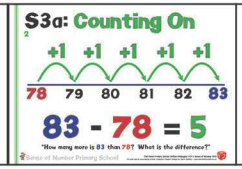






Y2





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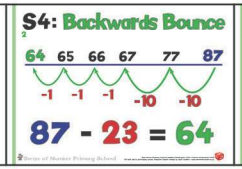

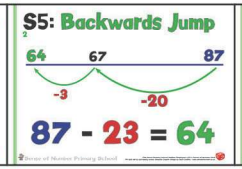

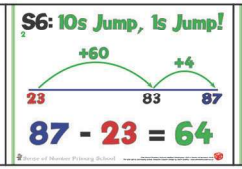

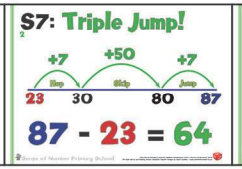

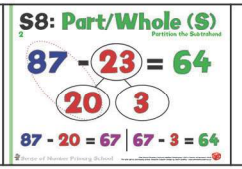

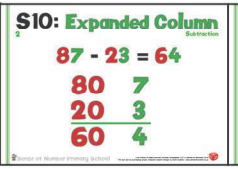

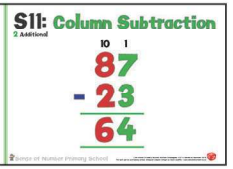

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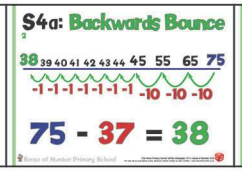
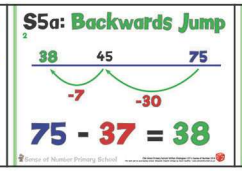
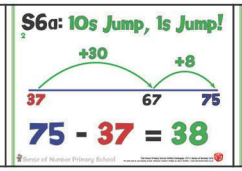
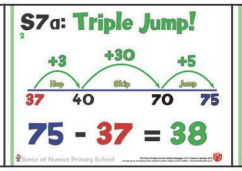
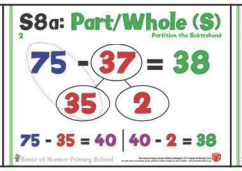
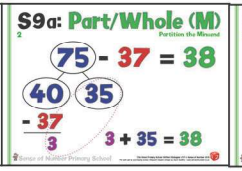


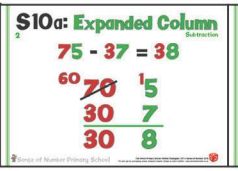


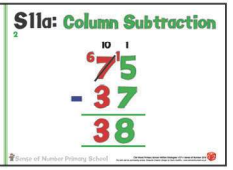




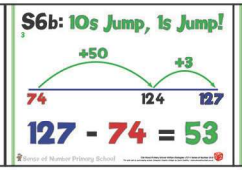


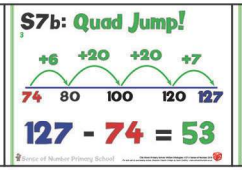


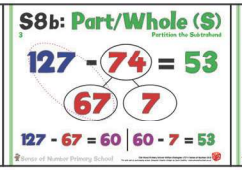


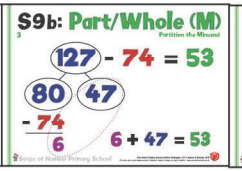


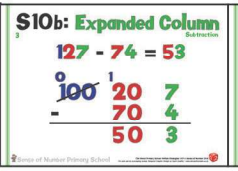
Y3

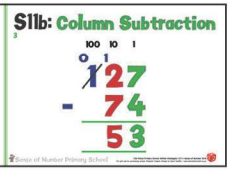












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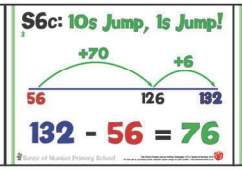
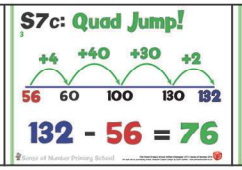
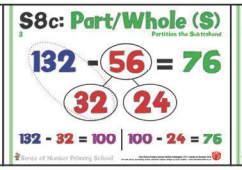
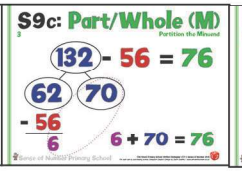
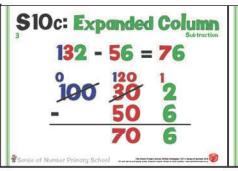
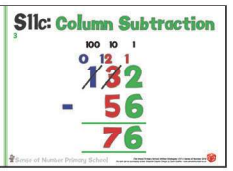




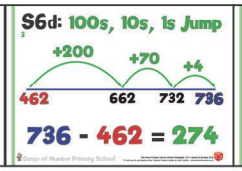


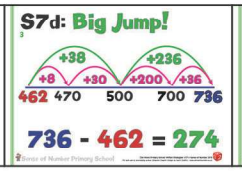


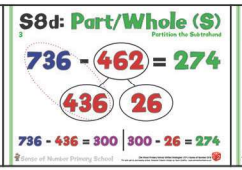




Y3







Y3			S8e: Part/Whole (S)	S9e: Part/Whole (M)	S8e: Part/Whole (S)	S9e: Part/Whole (M)	S10e: Expanded Column	S11e: Column Subtraction	
Y4			S8f: Part/Whole (S)	S9f: Part/Whole (M)	S8f: Part/Whole (S)	S9f: Part/Whole (M)		S11f: Column Subtraction	
Y4			S6g: 1000s, 100s, 10s, 1s Jump	S9g: Part/Whole (M)		S9g: Part/Whole (M)		S11g: Column Subtraction	
Y5								S11h: Column Subtraction	
Y5			S8h: Part/Whole (S)	S9h: Part/Whole (M)	S8h: Part/Whole (S)	S9h: Part/Whole (M)		S11i: Column Subtraction	
Y5			S11j: Column Subtraction		S11j: Column Subtraction			S11j: Column Subtraction	
Y5			S11k: Column Subtraction		S11k: Column Subtraction			S11k: Column Subtraction	

Progression Overviews

Sense of Number Written Strategies VCP © Sense of Number 2018

St Philip's CE Primary School

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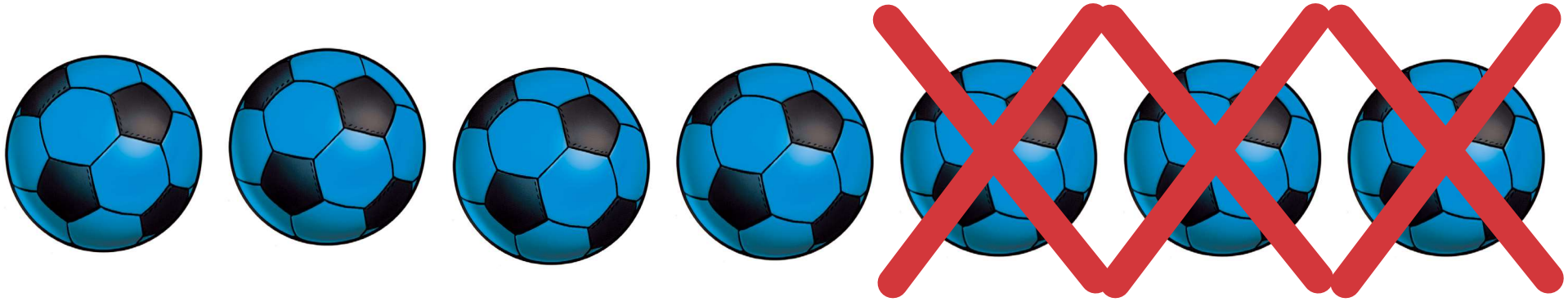
S1: Objects & Pictures

1

Removing Items (Taking Away)

"There were 7 footballs in the PE cupboard. 3 of them were taken out. How many were left in the cupboard? Answer: 4"

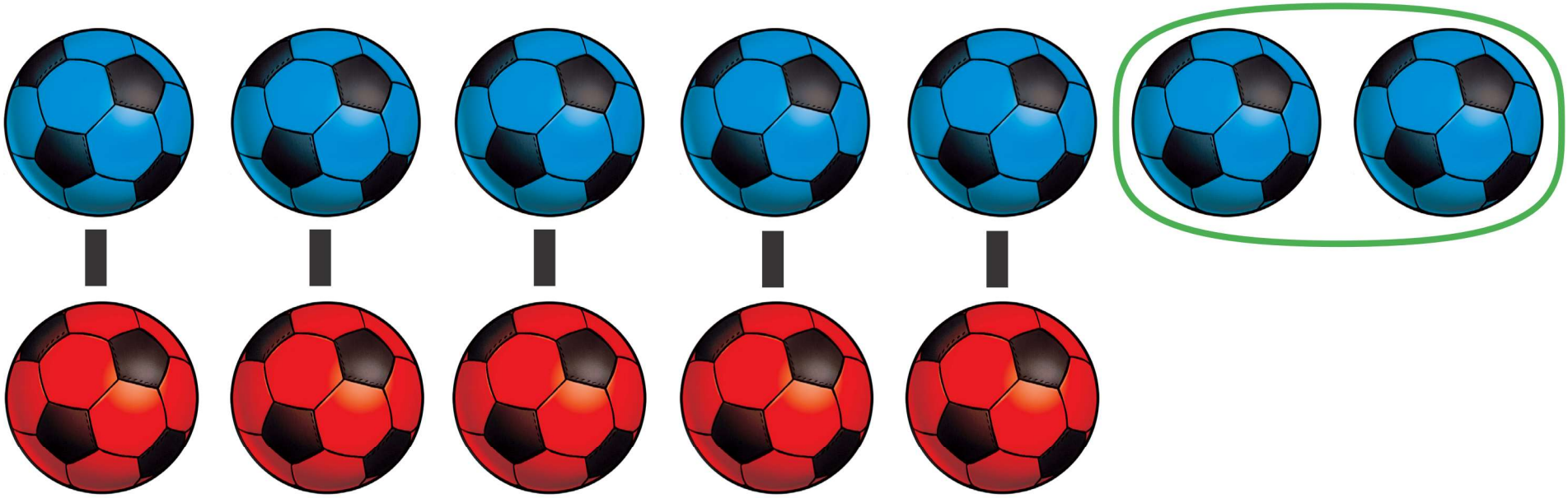


7 - 3 = 4

S1a: Objects and Pictures

1

Comparing Sets



$$7 - 5 = 2$$

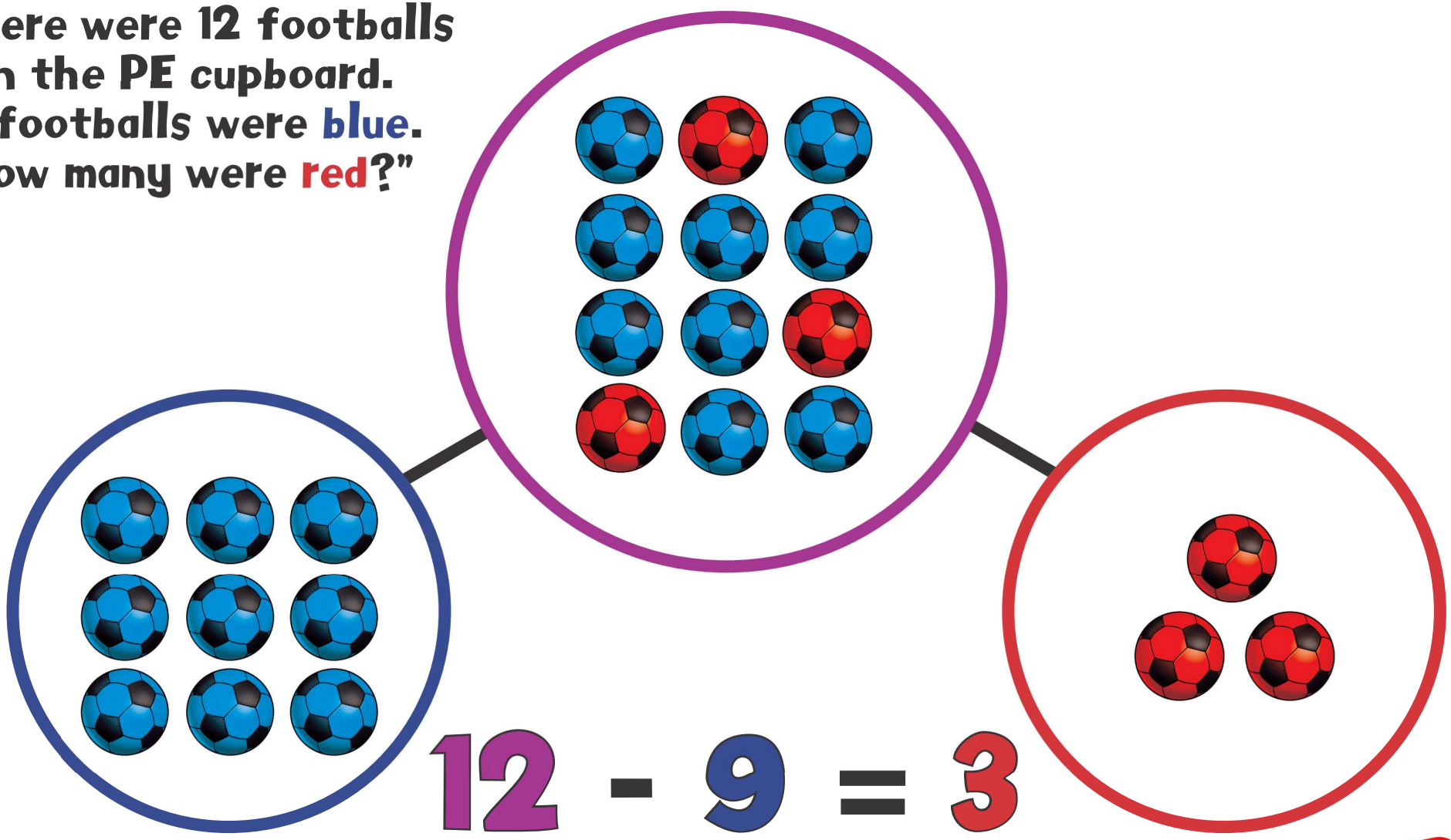
"There were 7 blue footballs and 5 red footballs? How many more blue footballs were there than red?" (What is the difference?)

S1b: Objects and Pictures

1

Part/Whole Model

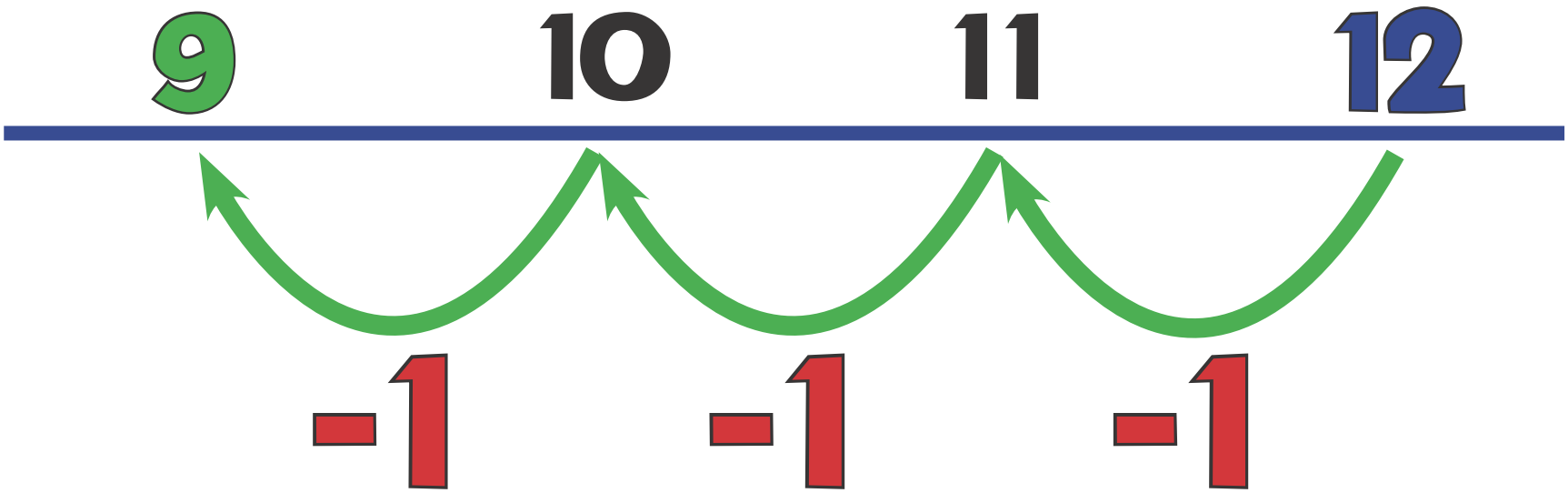
"There were 12 footballs
in the PE cupboard.
9 footballs were blue.
How many were red?"



12 - 9 = 3

S2: Counting Back

1



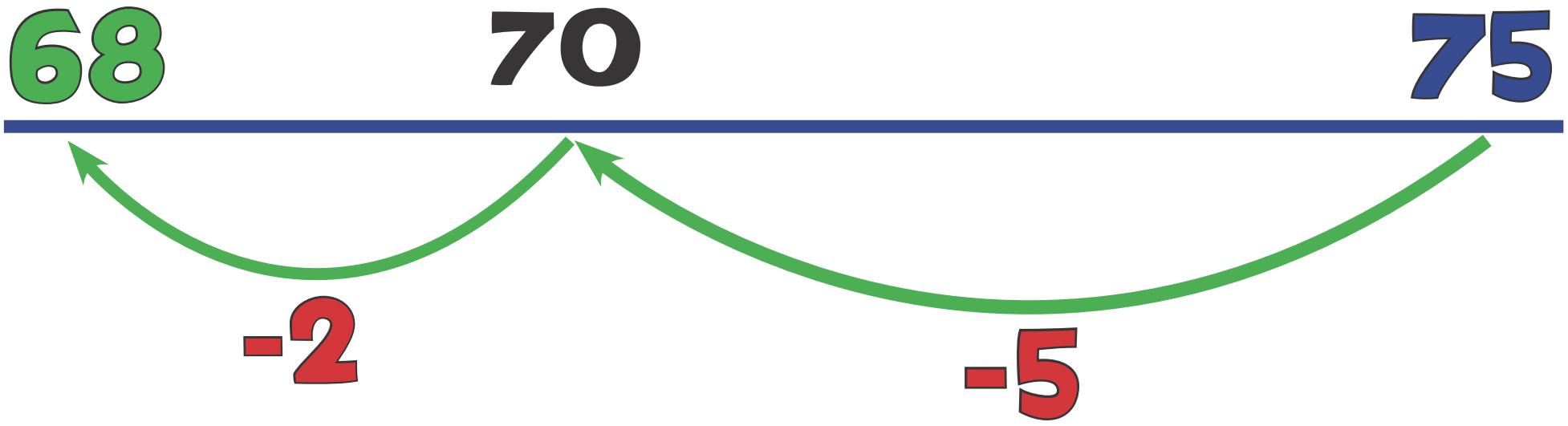
12 - 3 = 9

"What do I get if I take 3 away from 12? Answer: 9"

S2a: Counting Back

2

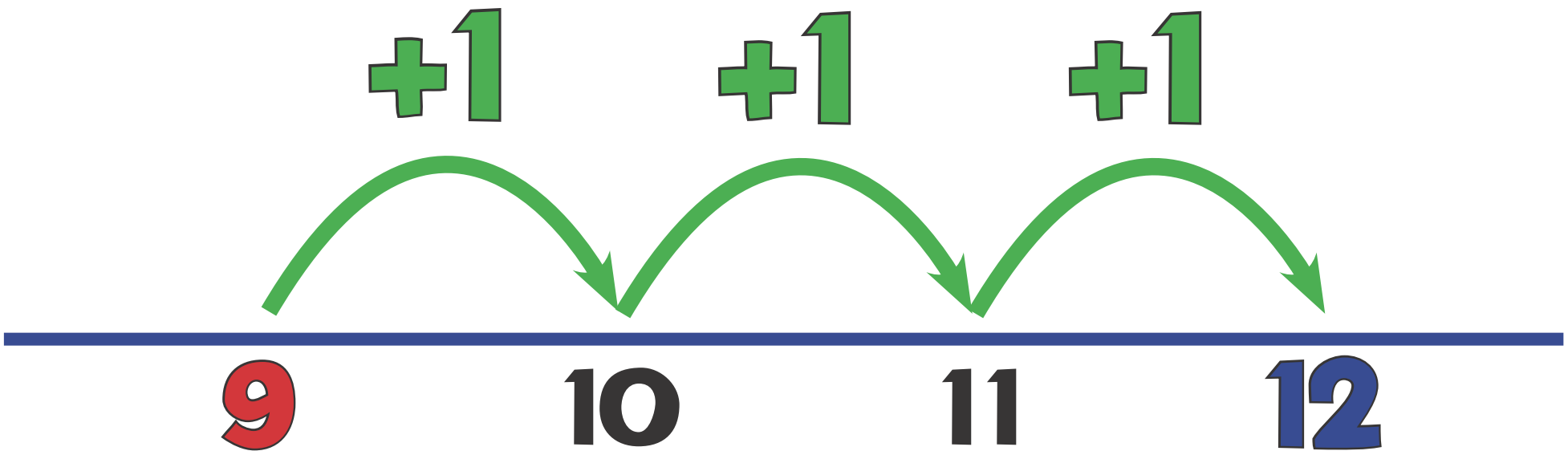
Big Steps



75 - 7 = 68

S3: Counting On

1

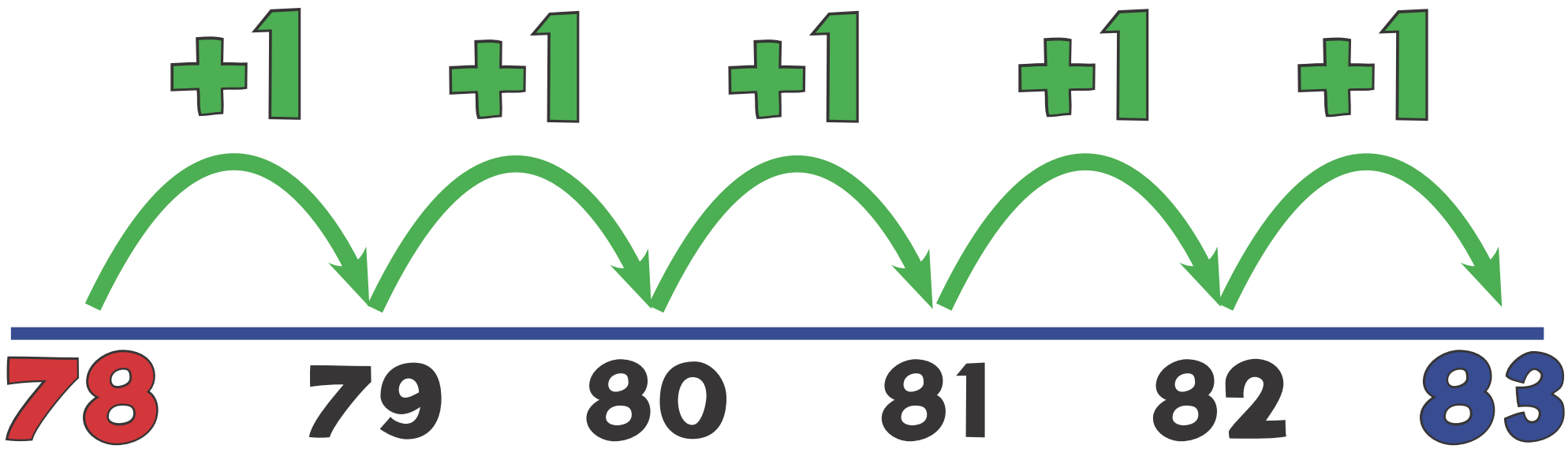


12 - 9 = 3

"How many more is 12 than 9? What is the difference?"

S3a: Counting On

2

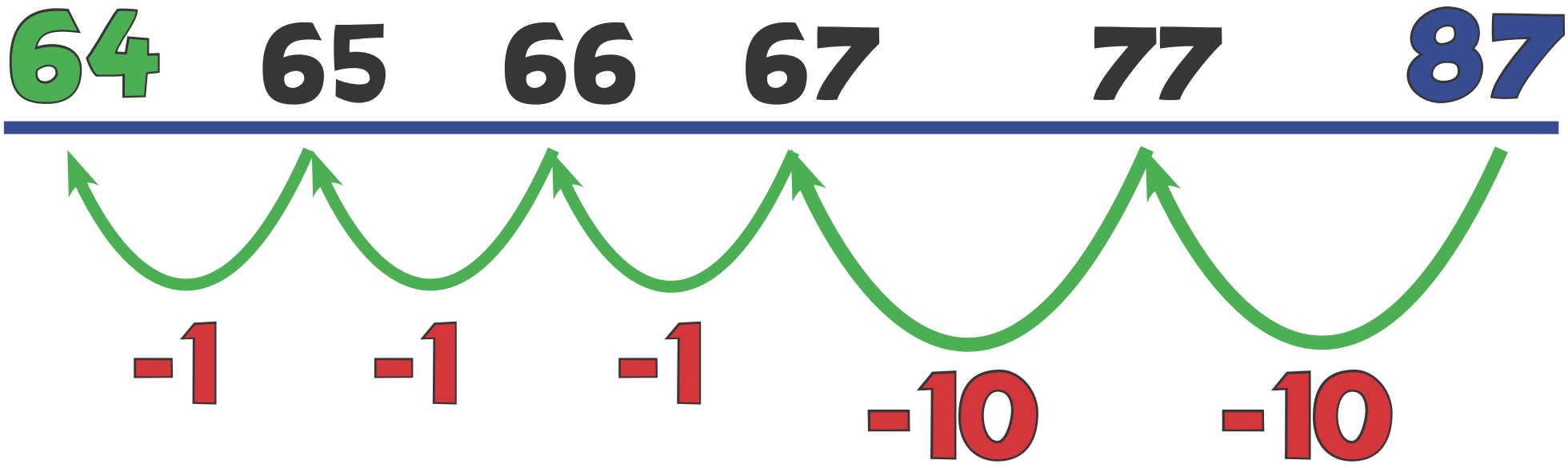


83 - 78 = 5

"How many more is 83 than 78? What is the difference?"

S4: Backwards Bounce

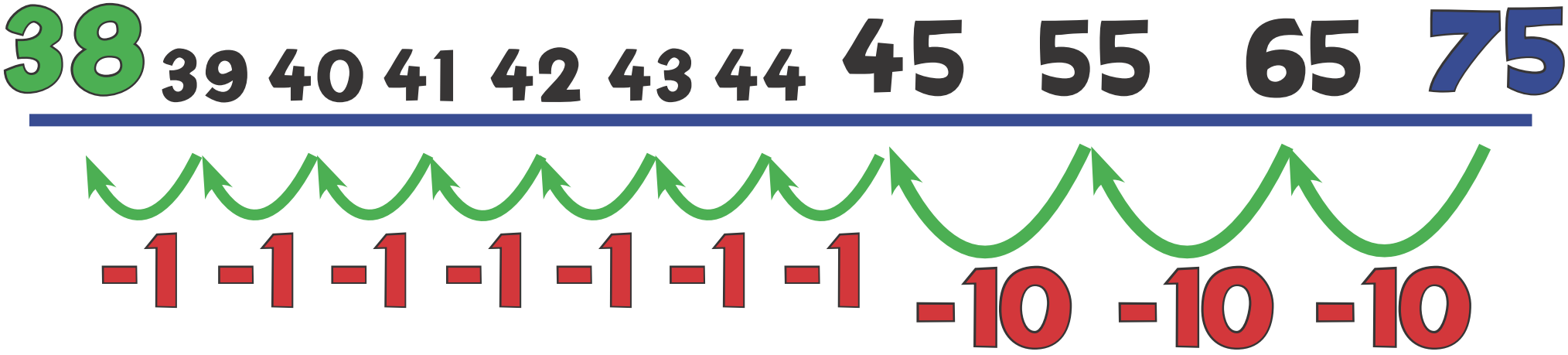
2



87 - 23 = 64

S4a: Backwards Bounce

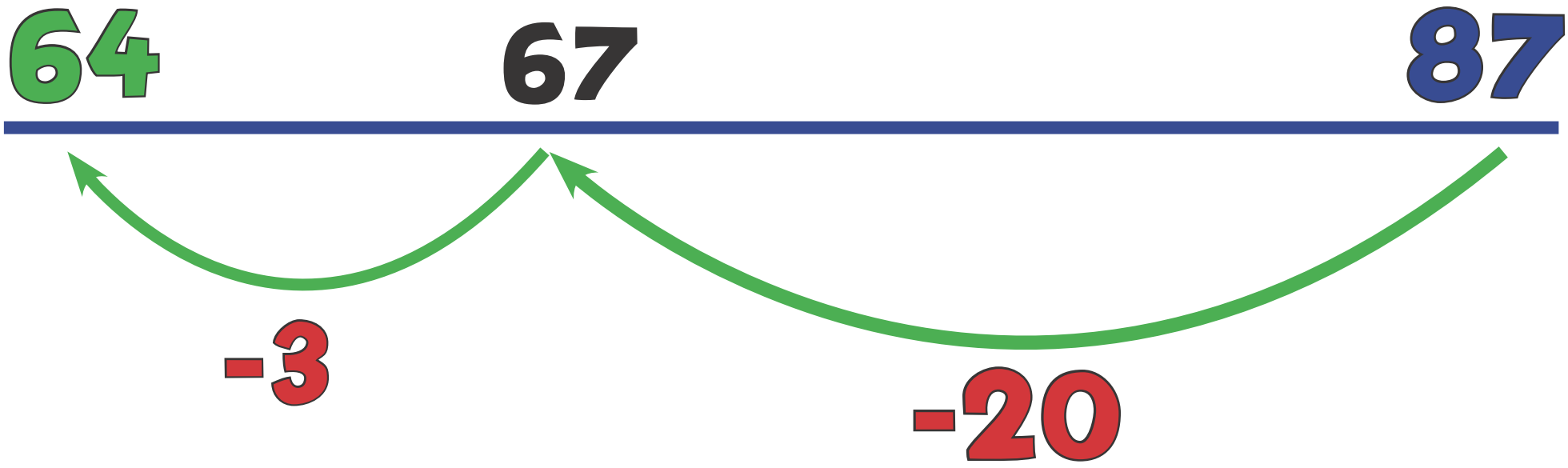
2



75 - 37 = 38

S5: Backwards Jump

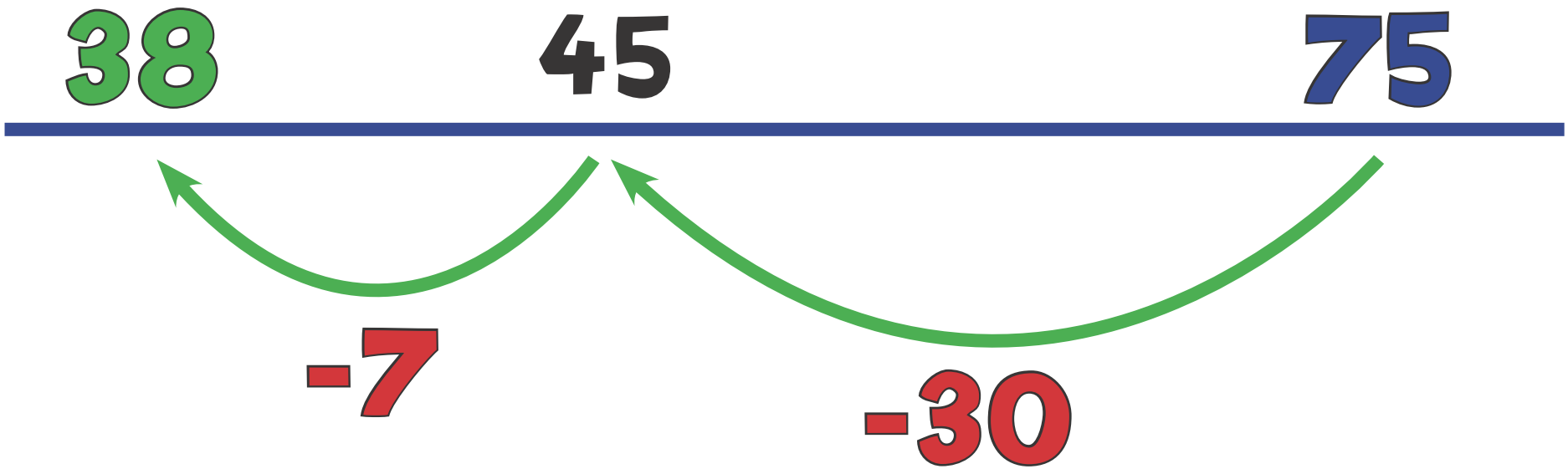
2



87 - 23 = 64

S5a: Backwards Jump

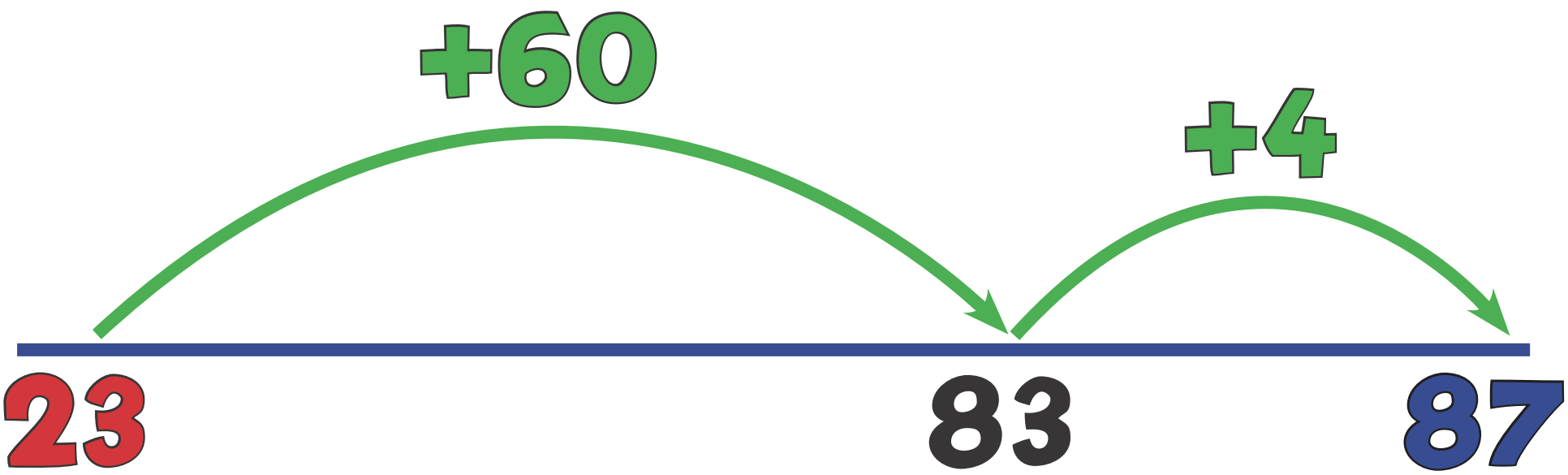
2



75 - 37 = 38

S6: 10s Jump, 1s Jump!

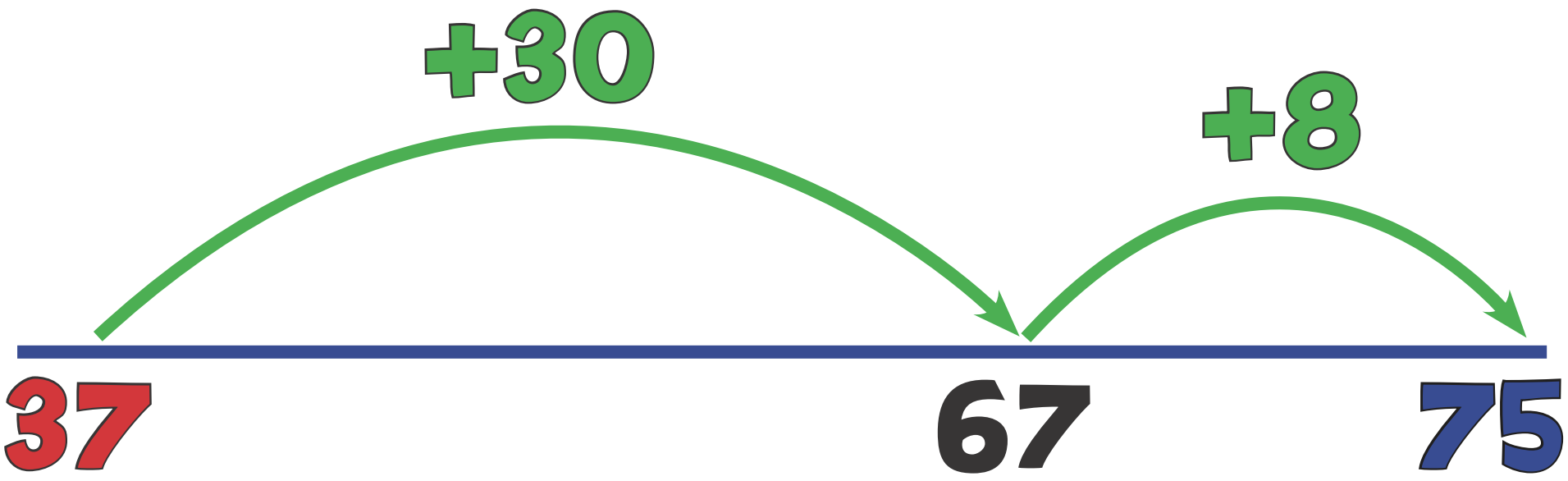
2



87 - 23 = 64

S6a: 10s Jump, 1s Jump!

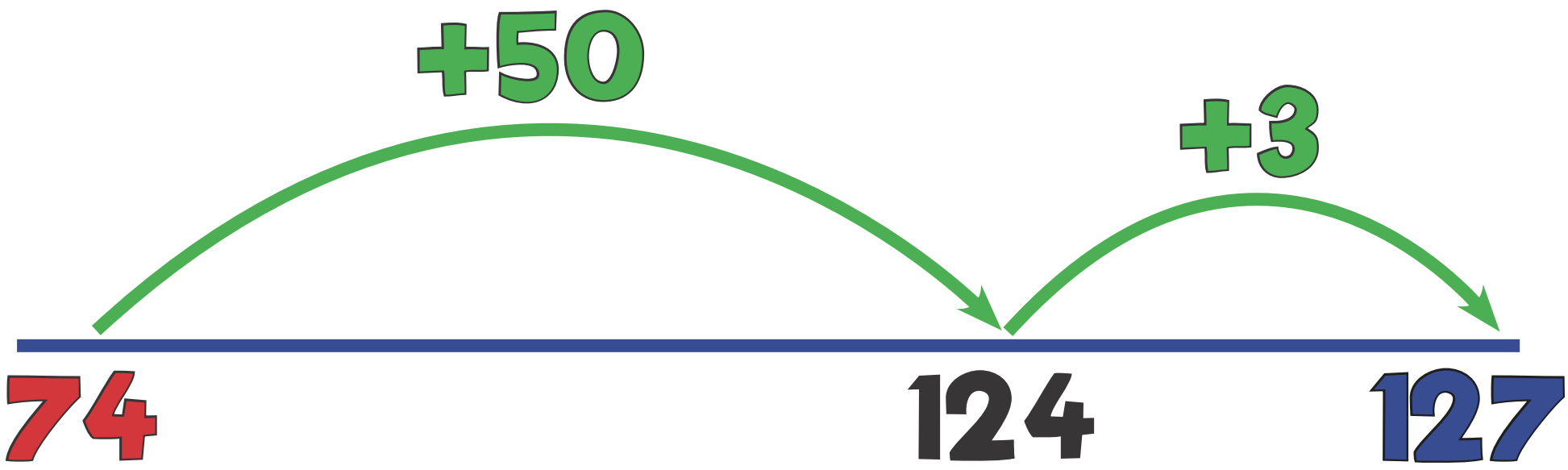
2



75 - 37 = 38

S6b: 10s Jump, 1s Jump!

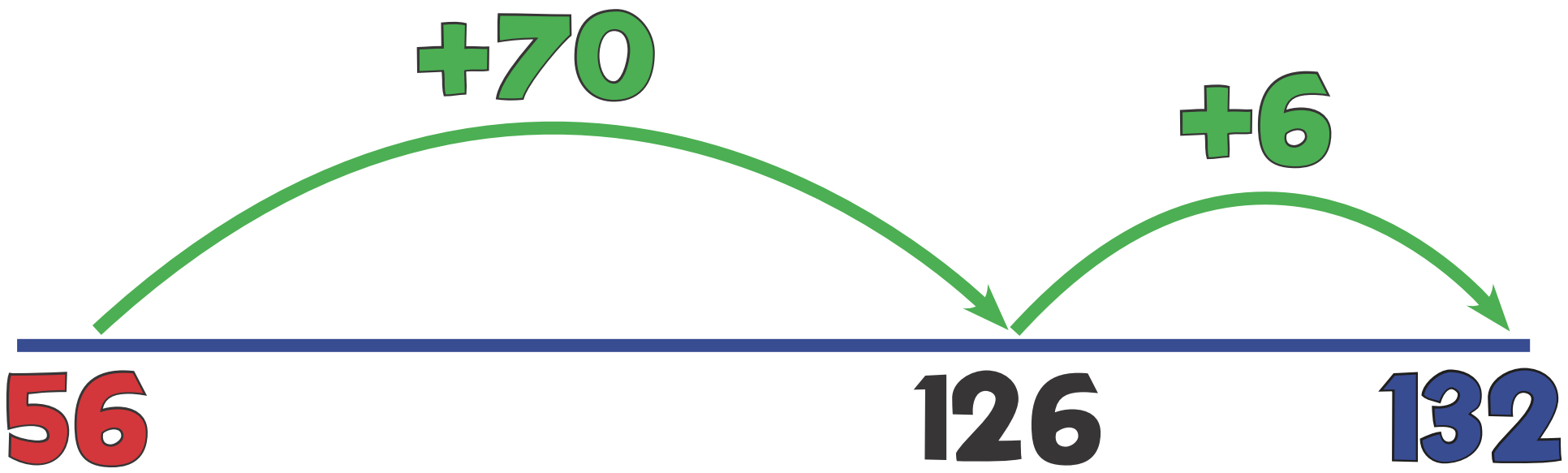
3



127 - 74 = 53

S6c: 10s Jump, 1s Jump!

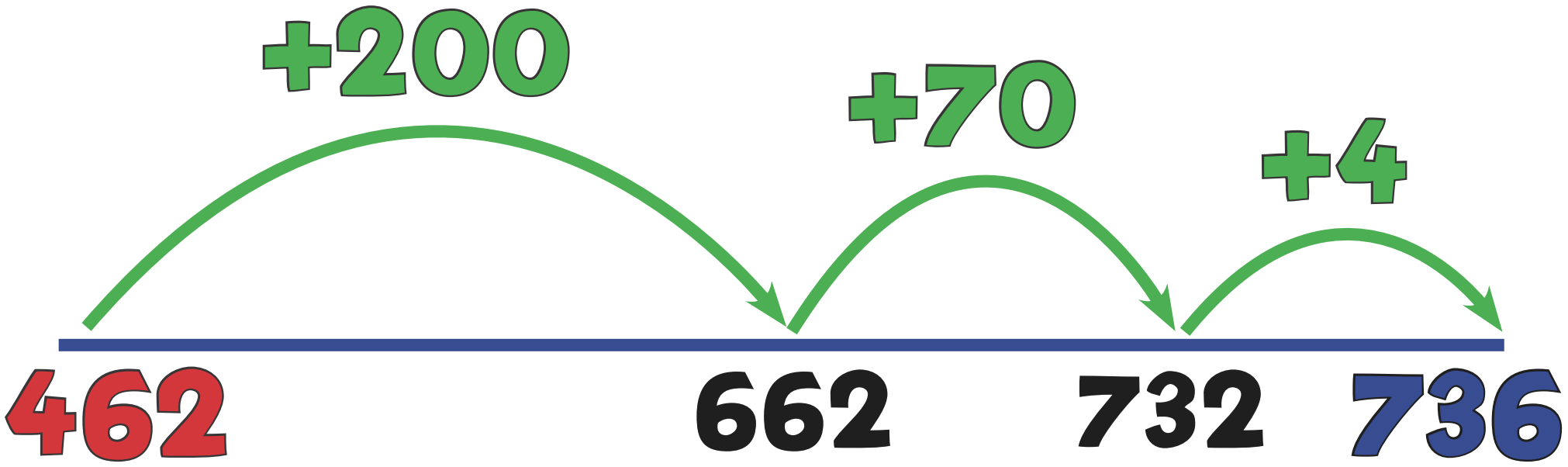
3



132 - 56 = 76

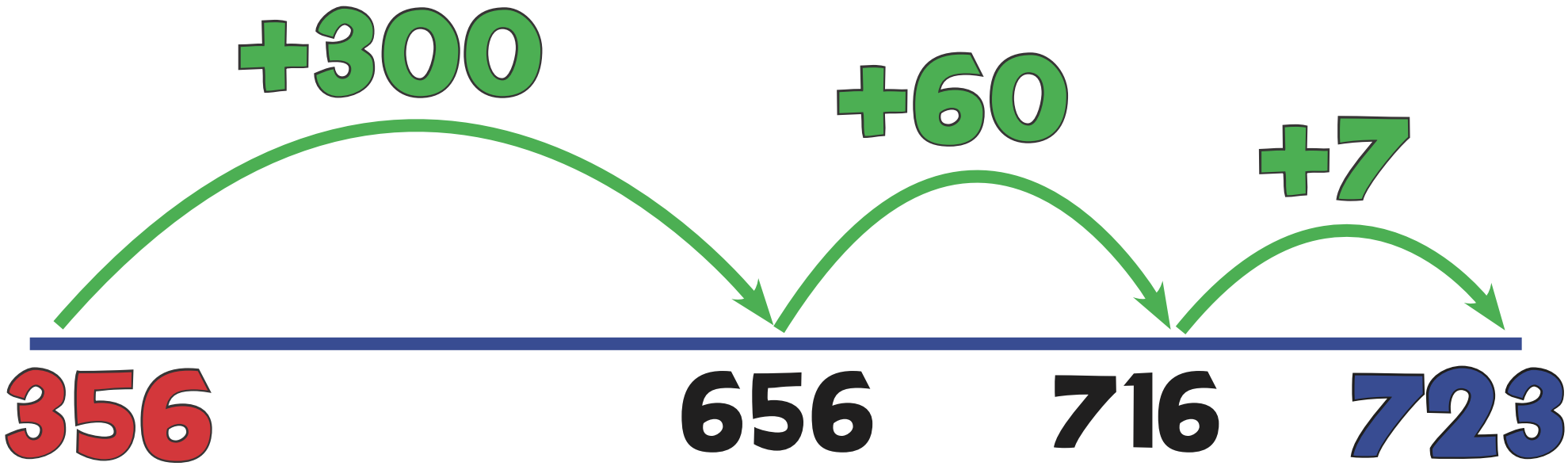
S6d: 100s, 10s, 1s Jump

3



736 - 462 = 274

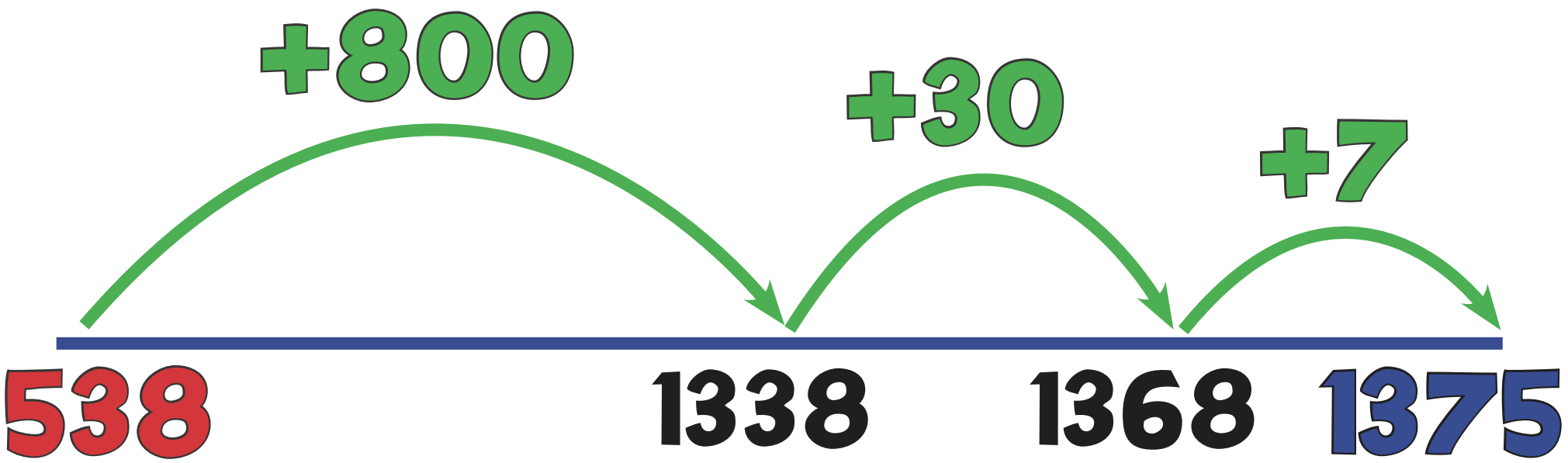
S6e: 100s, 10s, 1s Jump 3



723 - 356 = 367

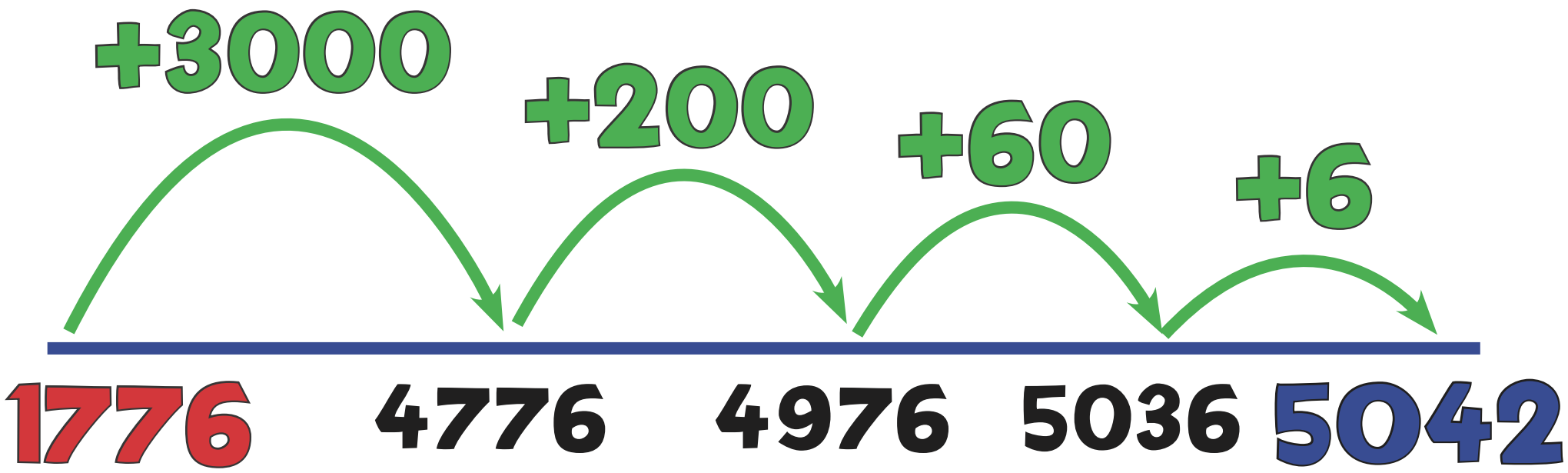
S6f: 100s, 10s, 1s Jump

4



1375 - 538 = 837

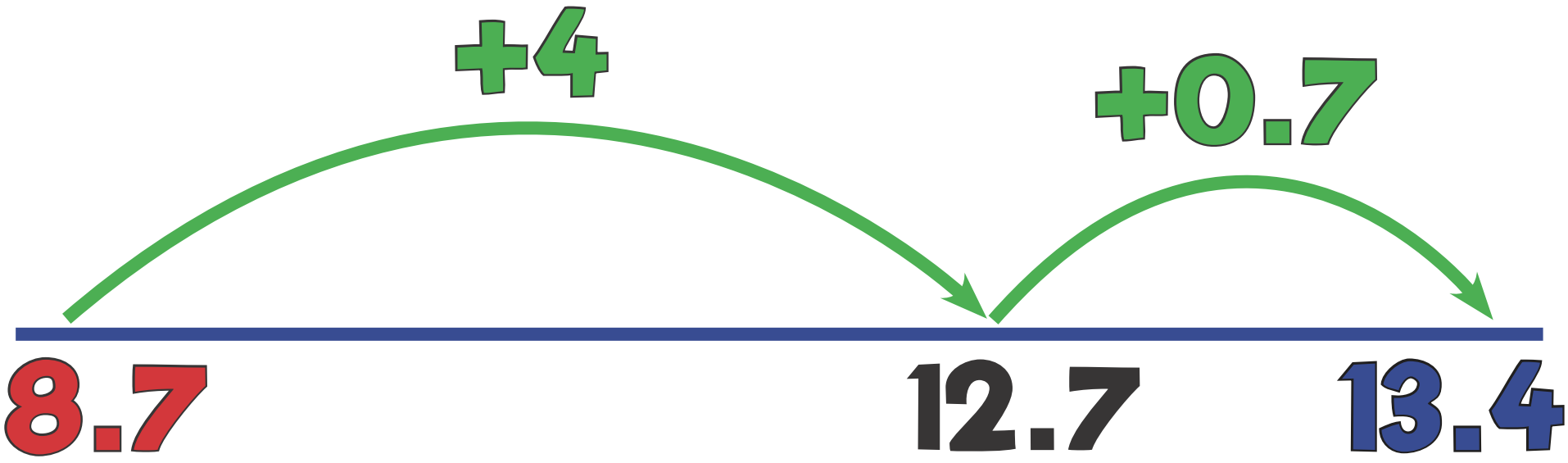
S6g: 1000s, 100s, 10s, 1s Jump 4



5042 - 1776 = 3266

S6i: 1s Jump, Tenths Jump!

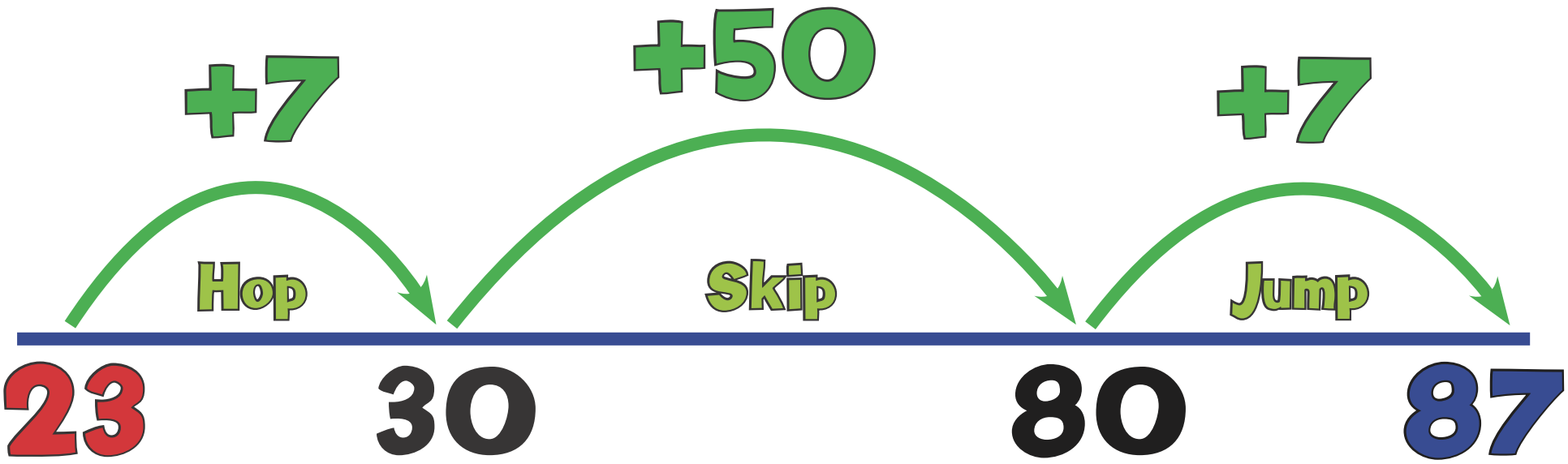
5



$$13.4 - 8.7 = 4.7$$

S7: Triple Jump!

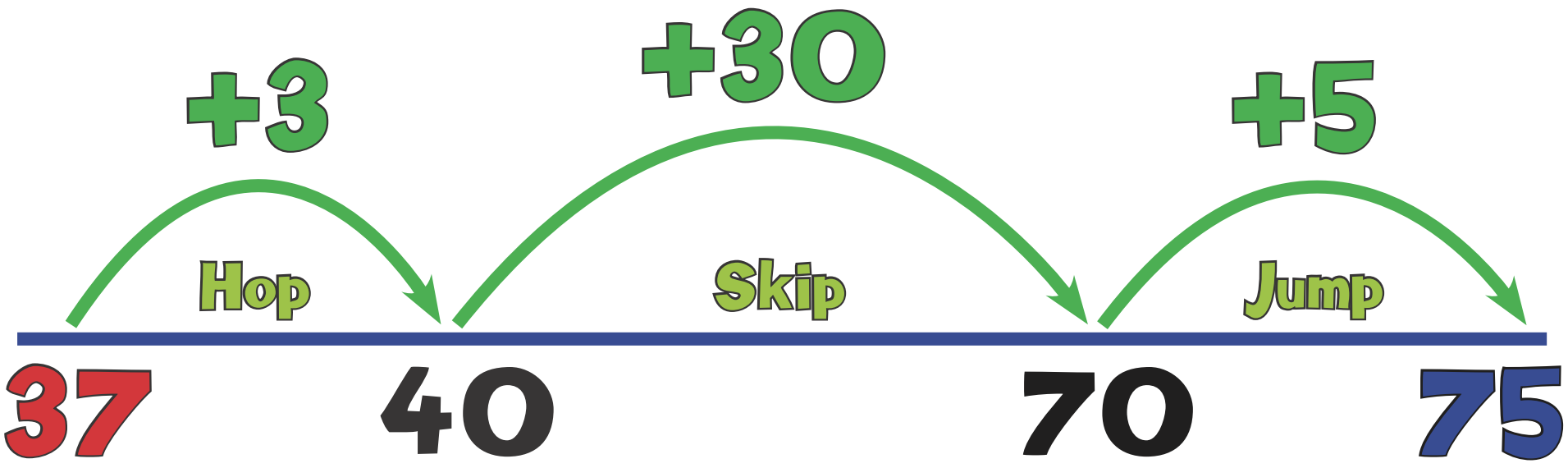
2



87 - 23 = 64

S7a: Triple Jump!

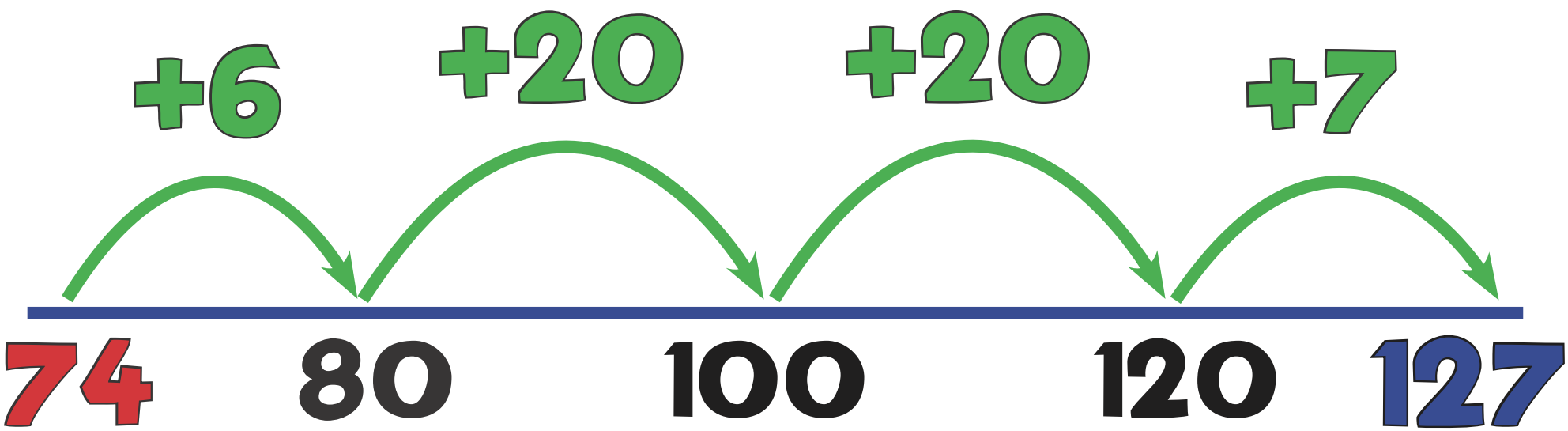
2



75 - 37 = 38

S7b: Quad Jump!

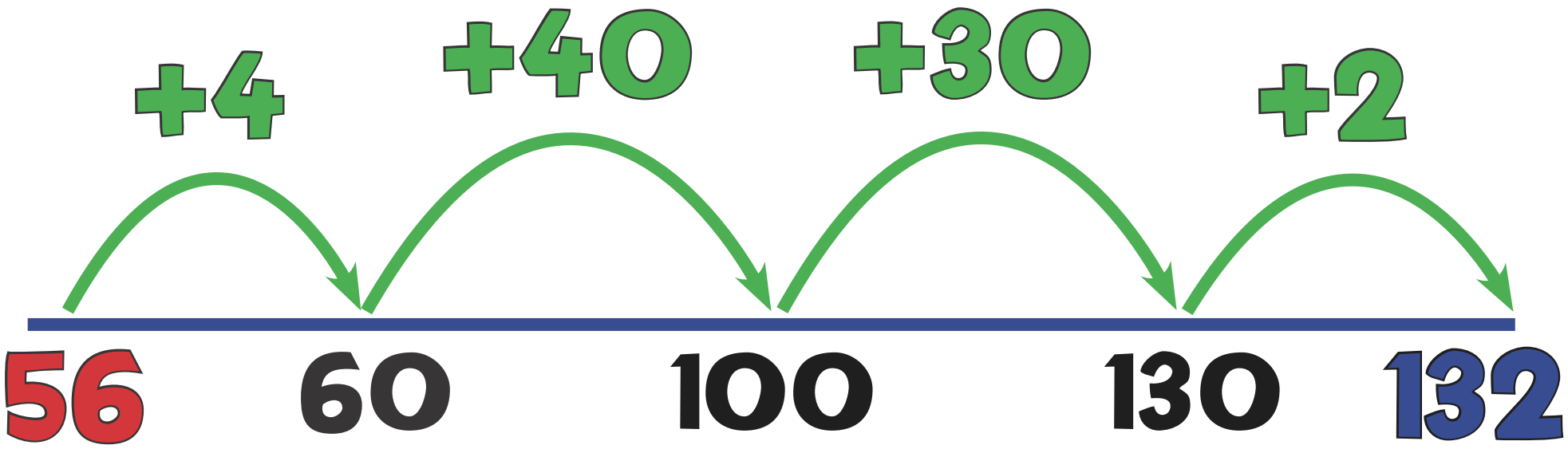
3



127 - 74 = 53

S7c: Quad Jump!

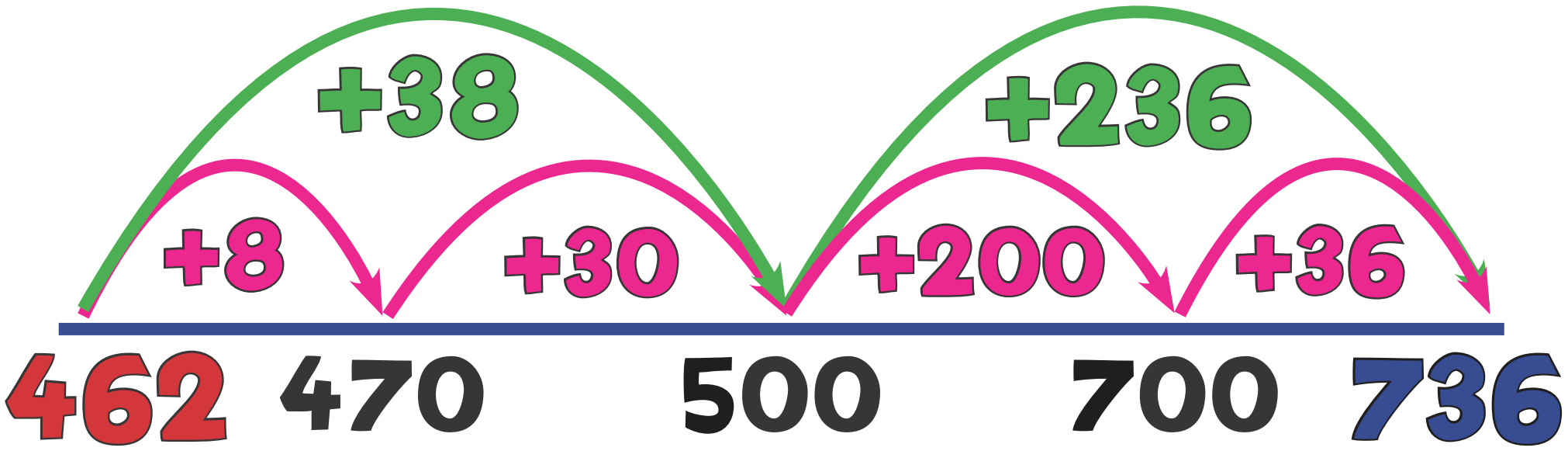
3



132 - 56 = 76

S7d: Big Jump!

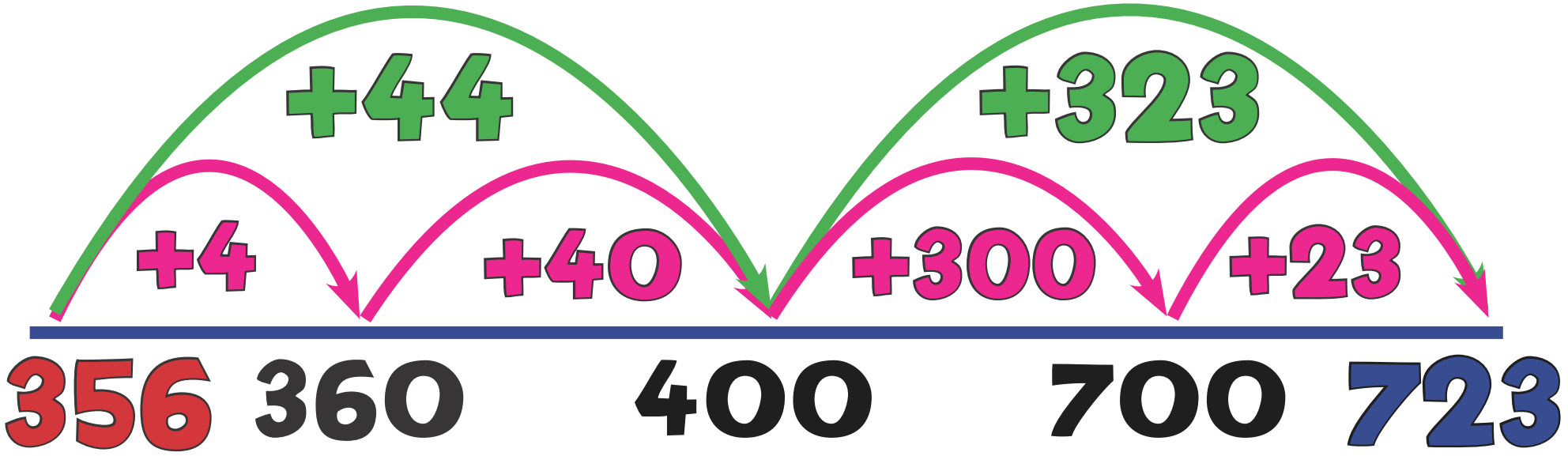
3



736 - 462 = 274

S7e: Big Jump!

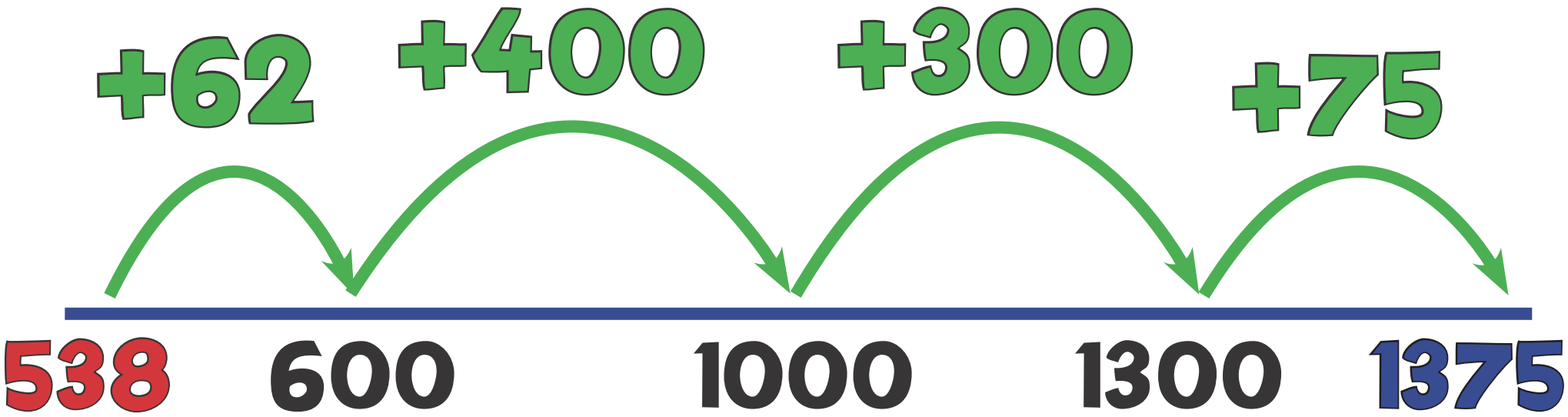
3



723 - 356 = 367

S7f: Quad Jump Extreme

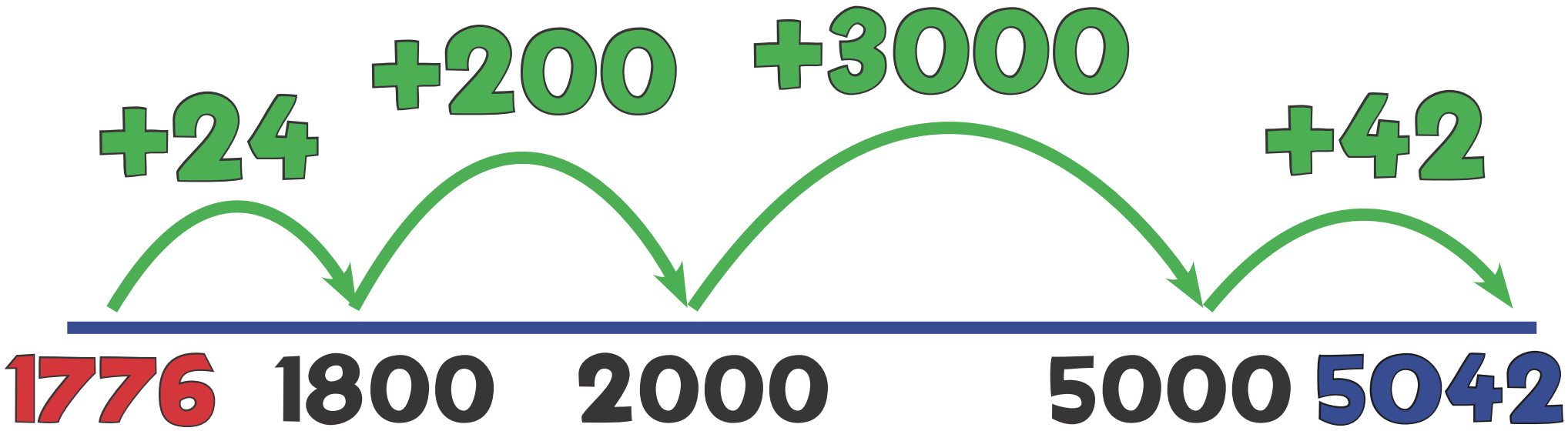
4



1375 - 538 = 837

S7g: Quad Jump Extreme

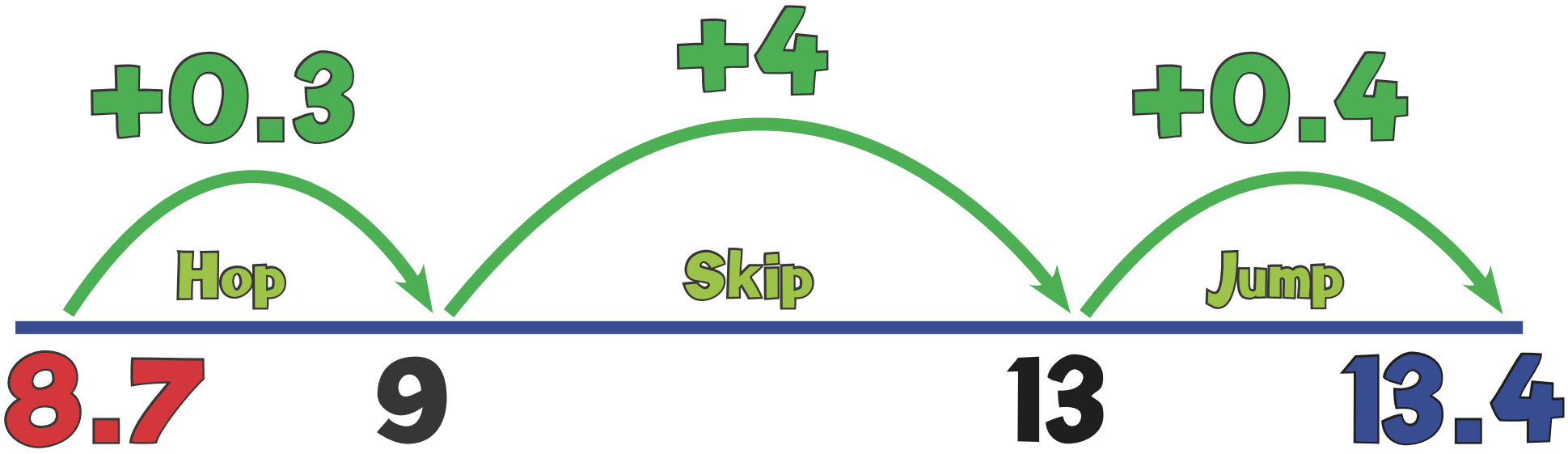
4



5042 - 1776 = 3266

S7i: Decimal T-J!

5

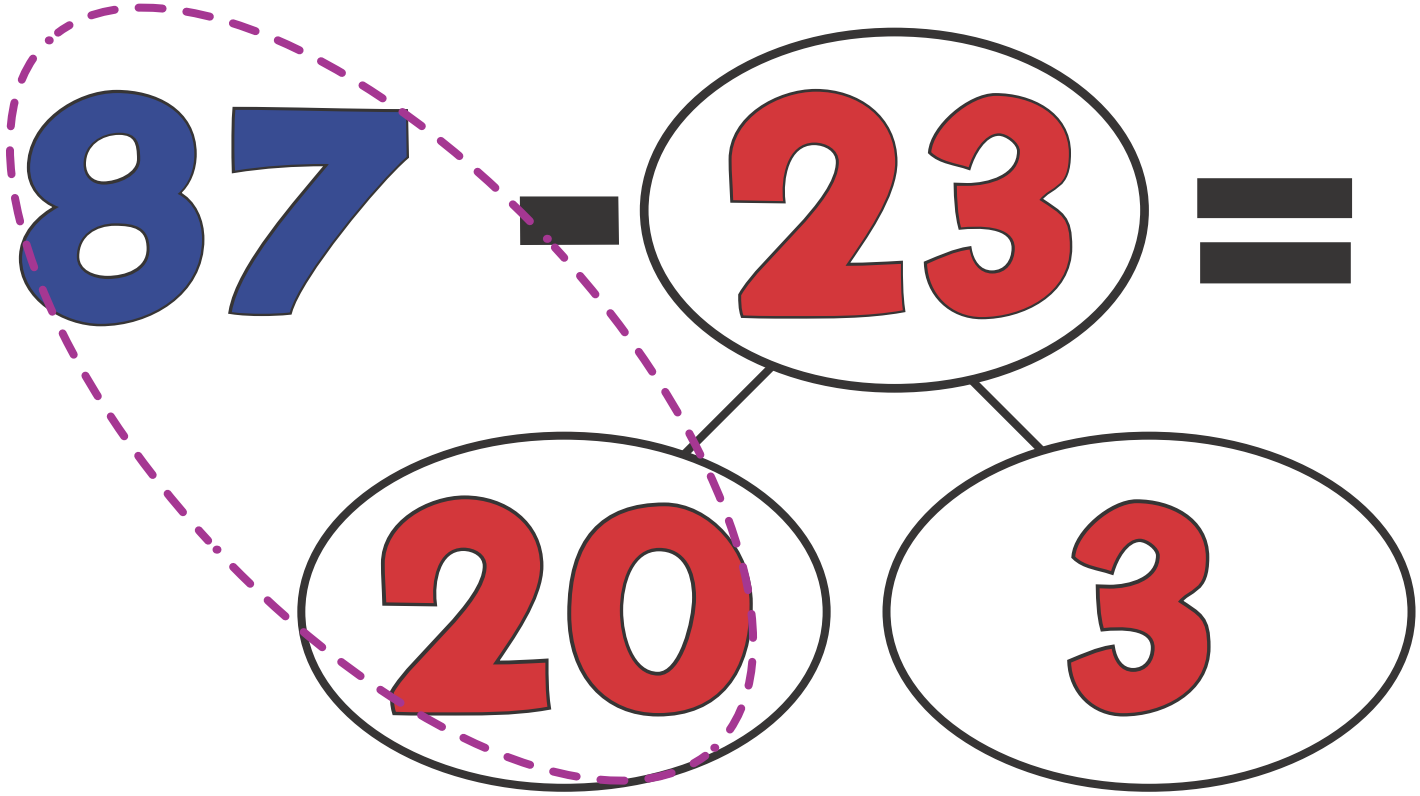


$$13.4 - 8.7 = 4.7$$

S8: Part/Whole (S)

2

Partition the Subtrahend

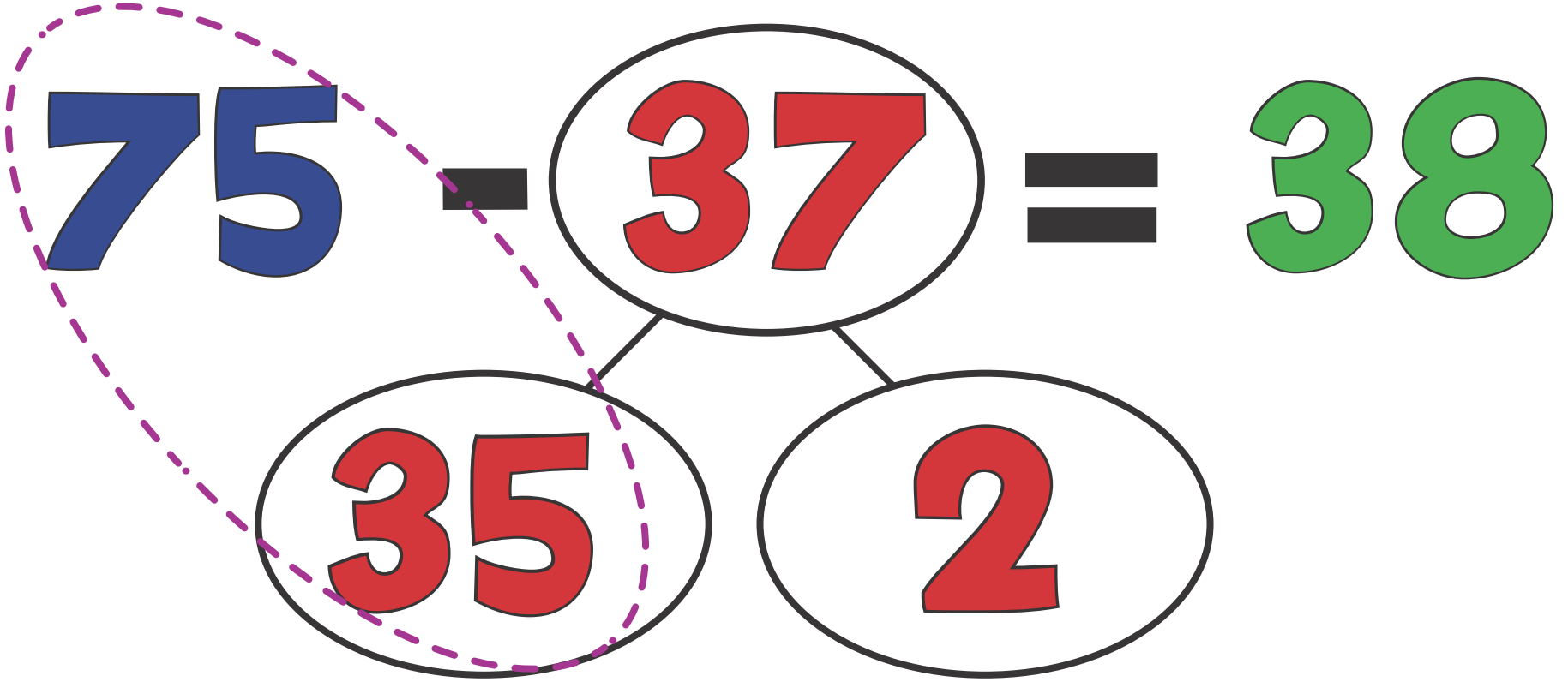


87 - 20 = 67 | 67 - 3 = 64

S8a: Part/Whole (S)

2

Partition the Subtrahend

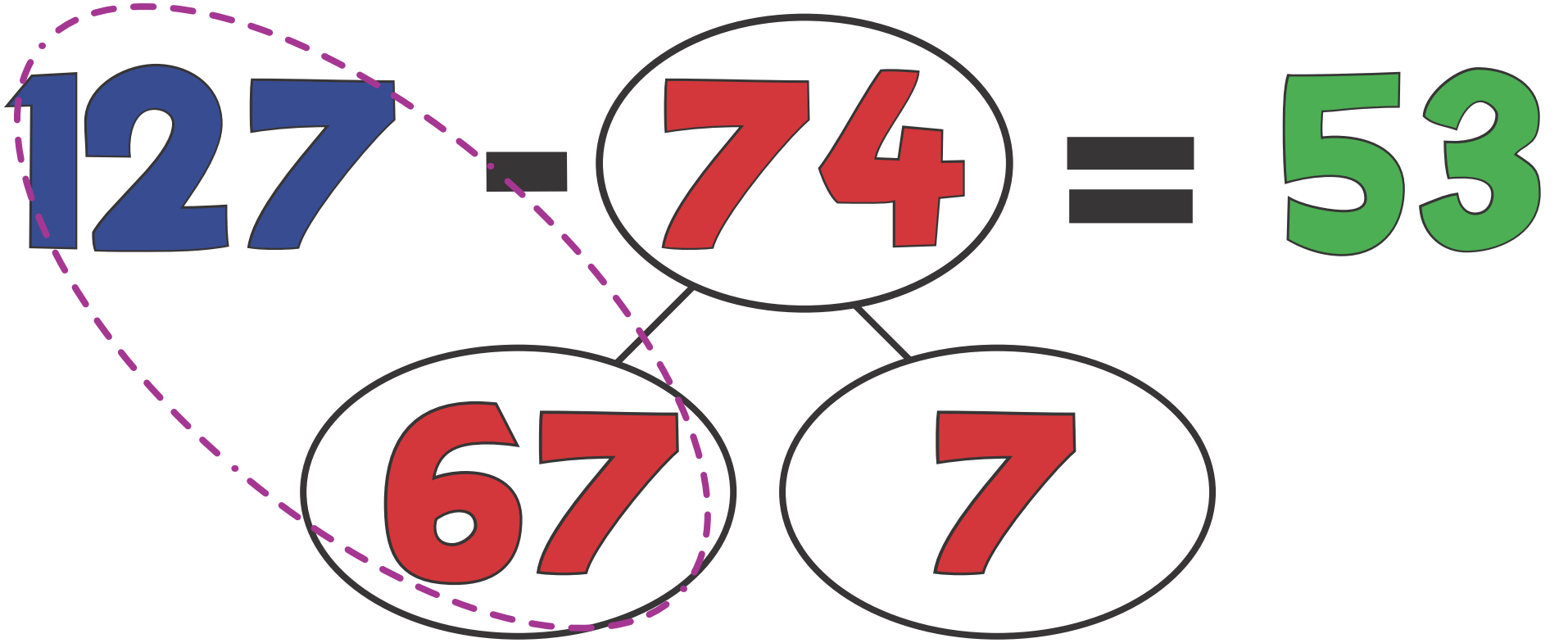


75 - 35 = 40 | 40 - 2 = 38

S8b: Part/Whole (S)

3

Partition the Subtrahend

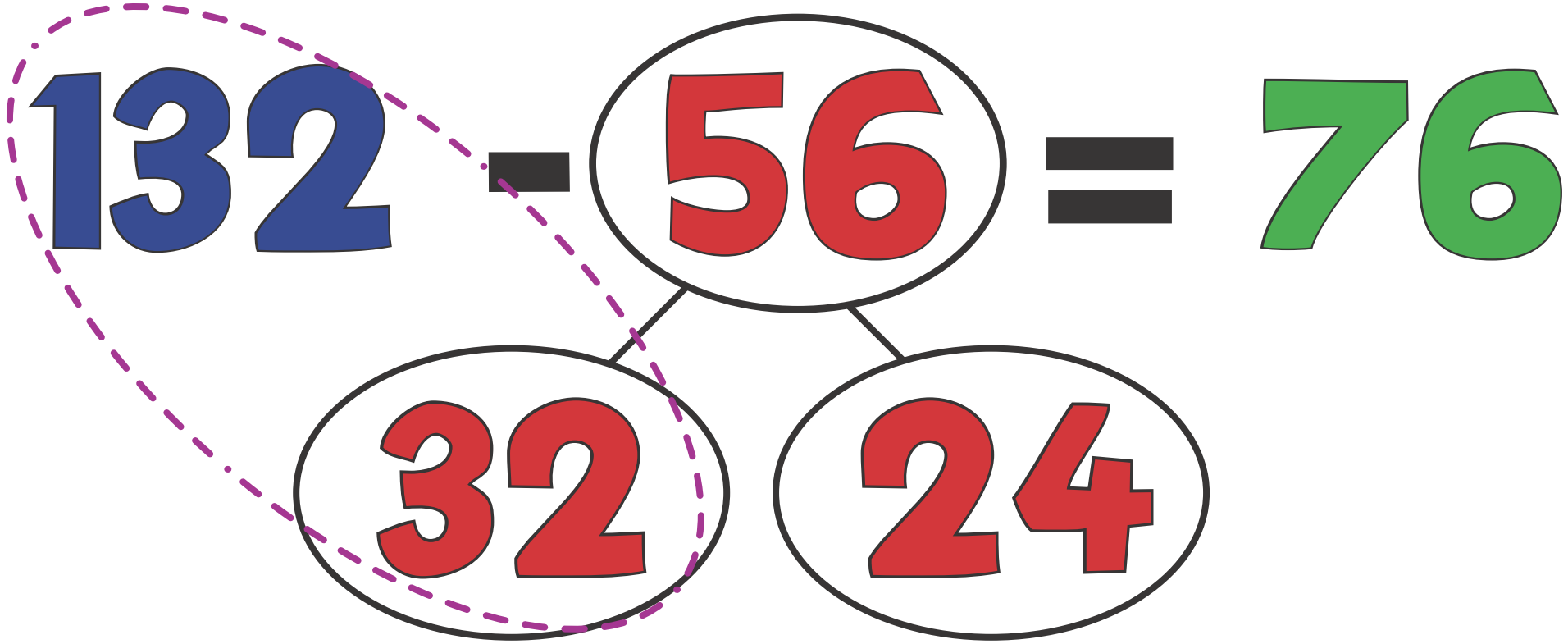


127 - 67 = 60 | 60 - 7 = 53

S8c: Part/Whole (S)

3

Partition the Subtrahend

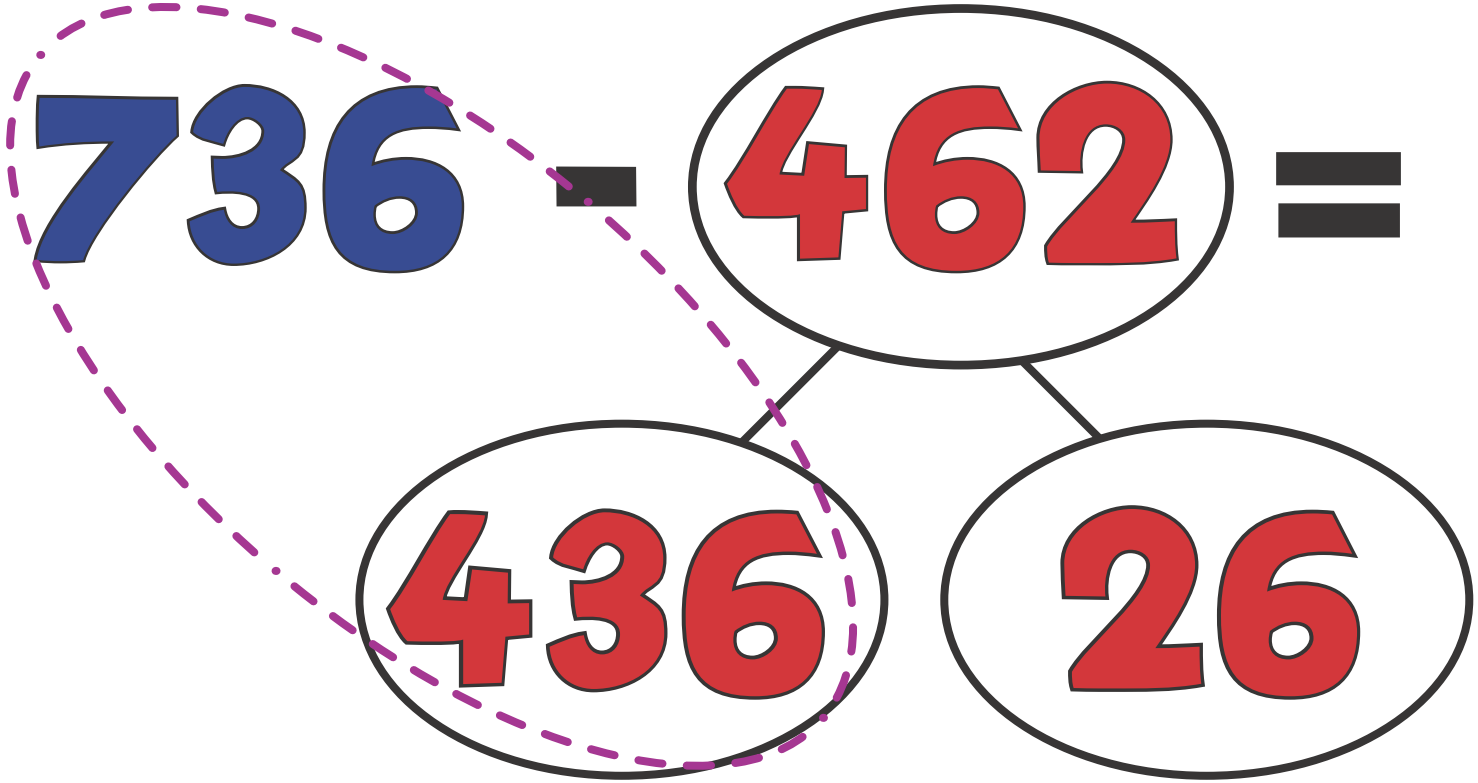


132 - 32 = 100 | 100 - 24 = 76

S8d: Part/Whole (S)

3

Partition the Subtrahend

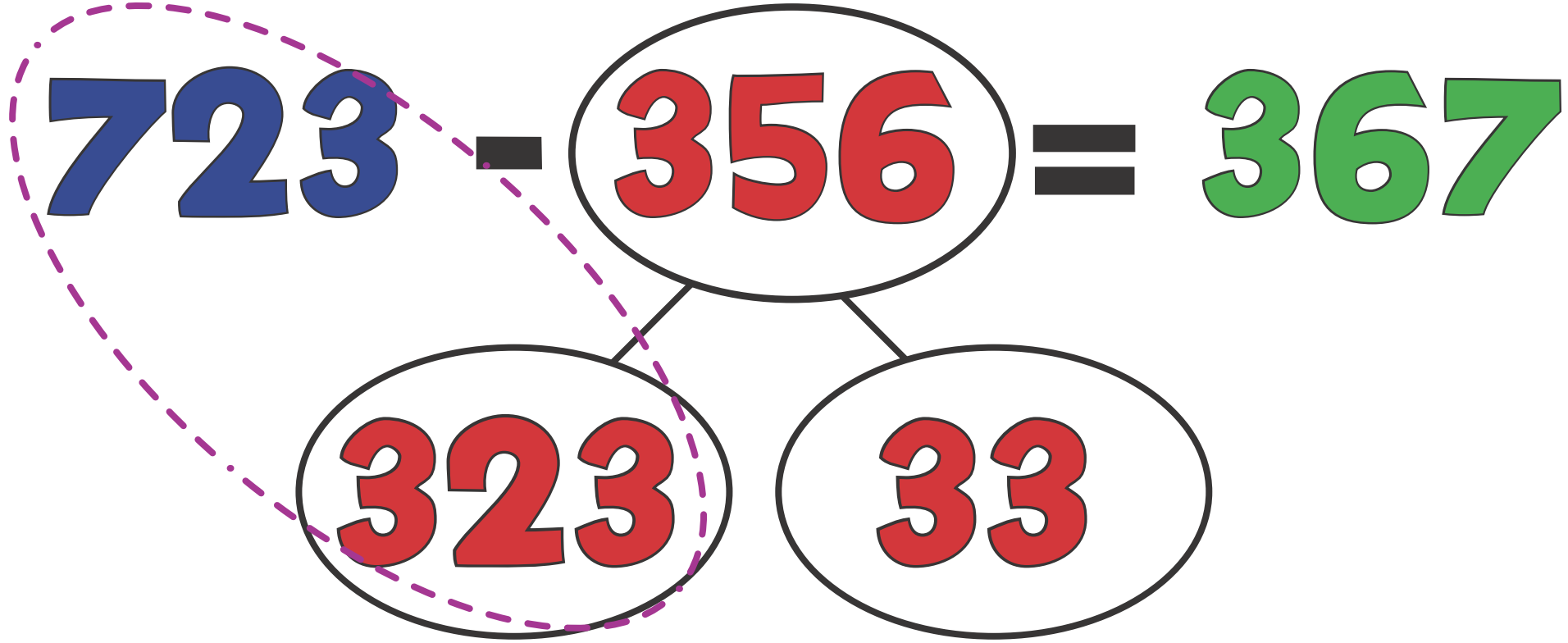


736 - 436 = 300 | 300 - 26 = 274

S8e: Part/Whole (S)

3

Partition the Subtrahend

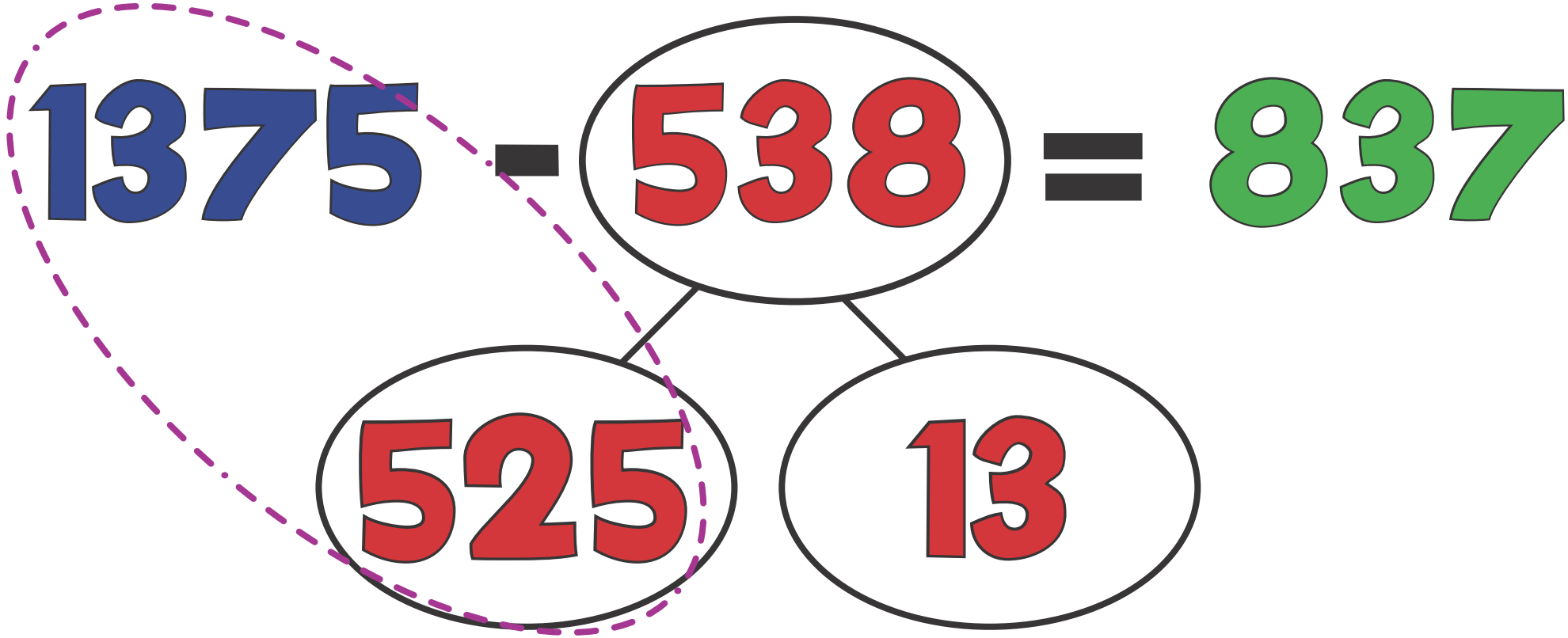


723 - 323 = 400 | 400 - 33 = 367

S8f: Part/Whole (S)

4

Partition the Subtrahend

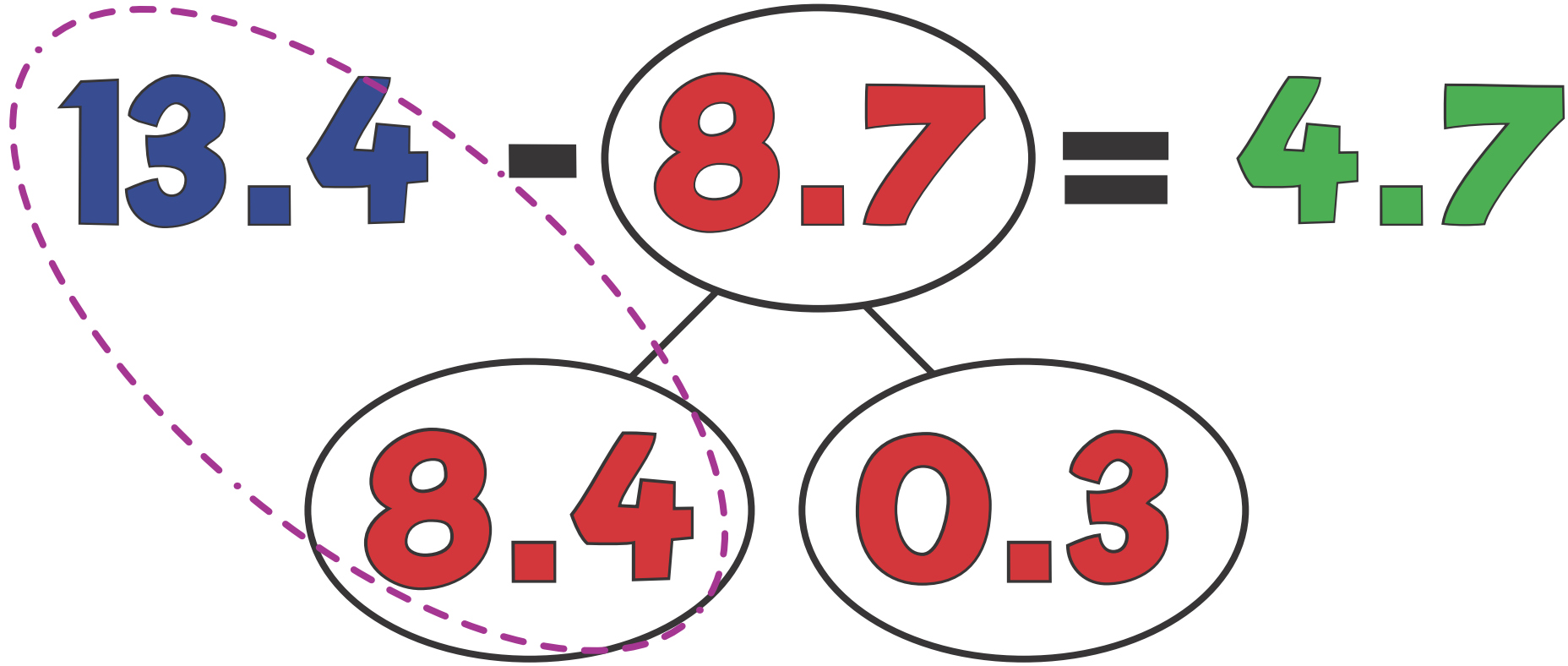


1375 - 525 = 850 | 850 - 13 = 837

S8h: Part/Whole (S)

5

Partition the Subtrahend

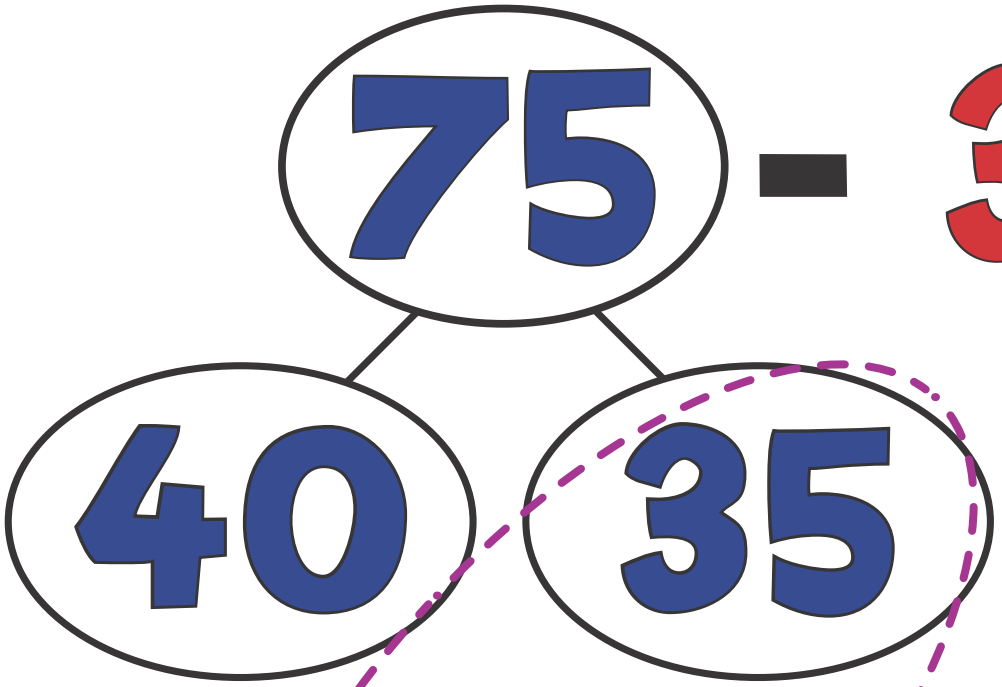


13.4 - 8.4 = 5 | 5 - 0.3 = 4.7

S9a: Part/Whole (M)

2

Partition the Minuend



75 - 37 = 38

- 37

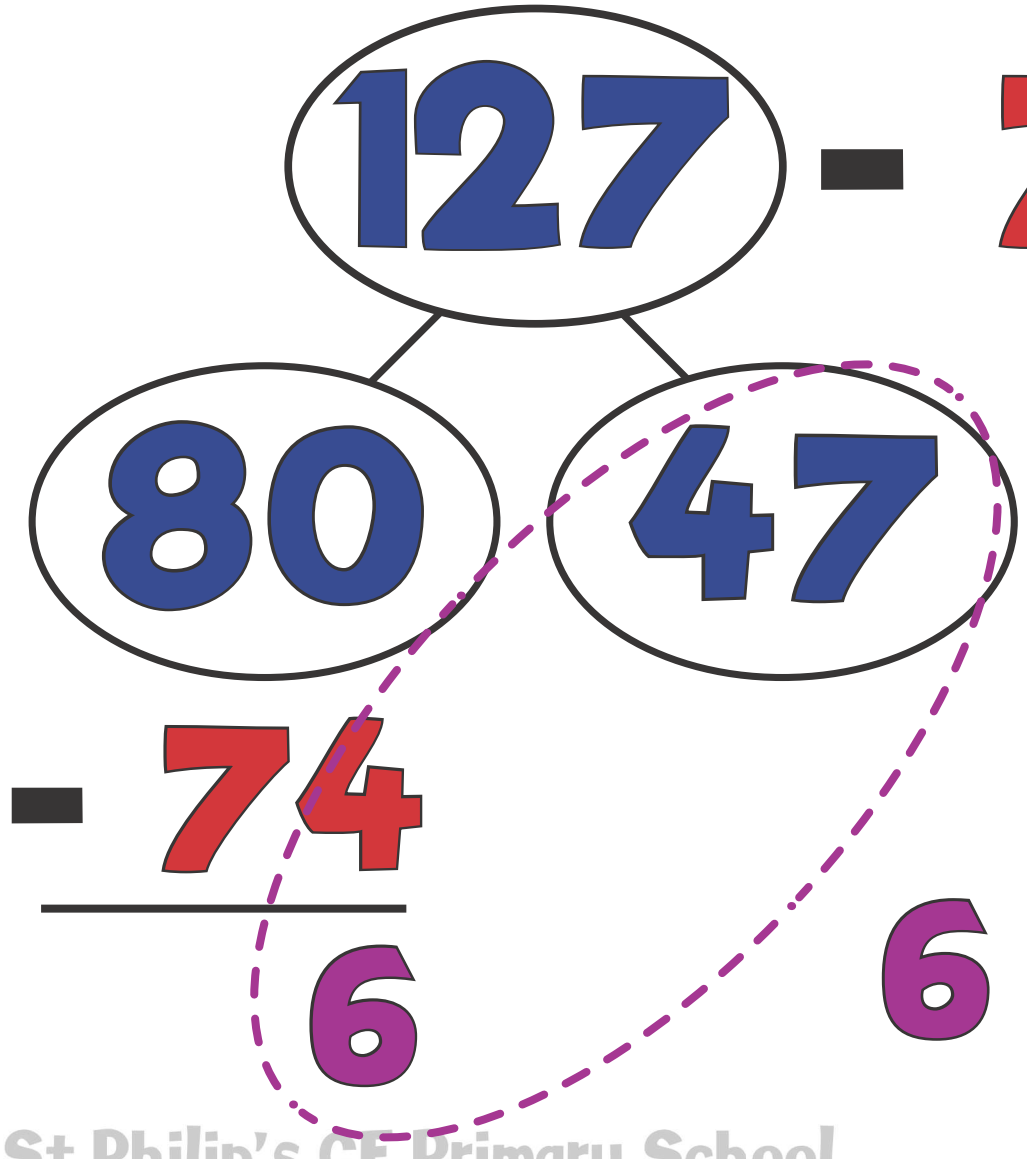
3

3 + 35 = 38

S9b: Part/Whole (M)

3

Partition the Minuend



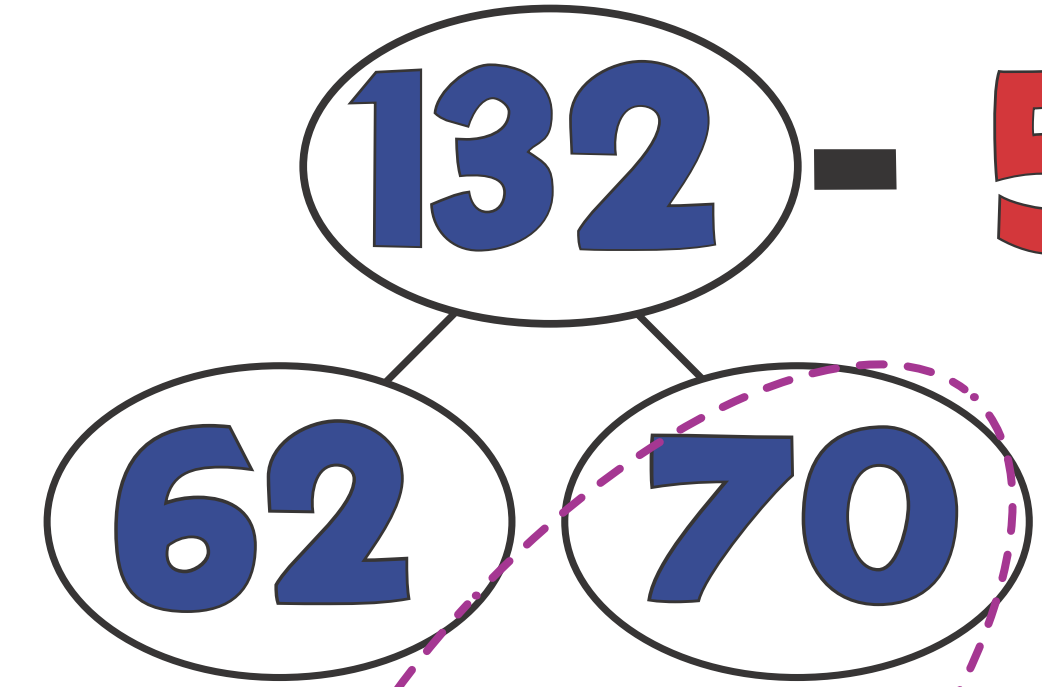
127 - 74 = 53

6 + 47 = 53

S9c: Part/Whole (M)

3

Partition the Minuend



132 - 56 = 76

- 56

6

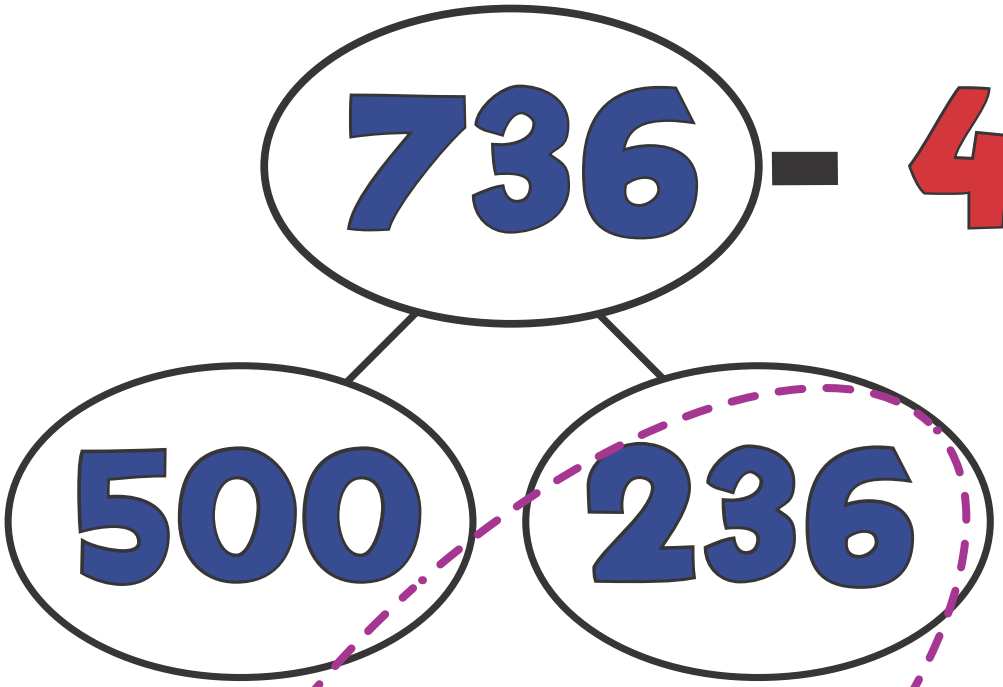
6 + 70 = 76

S9d: Part/Whole (M)

3

Partition the Minuend

736 - 462 = 274



- 462

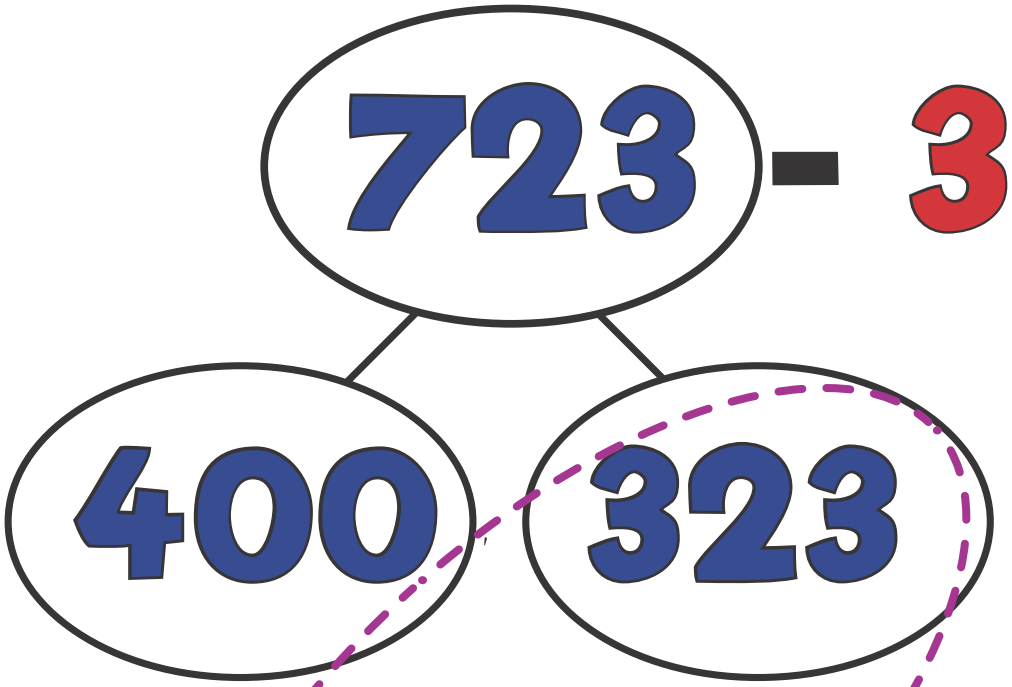
38

38 + 236 = 274

S9e: Part/Whole (M)

3

Partition the Minuend



723 - 356 = 367

- 356

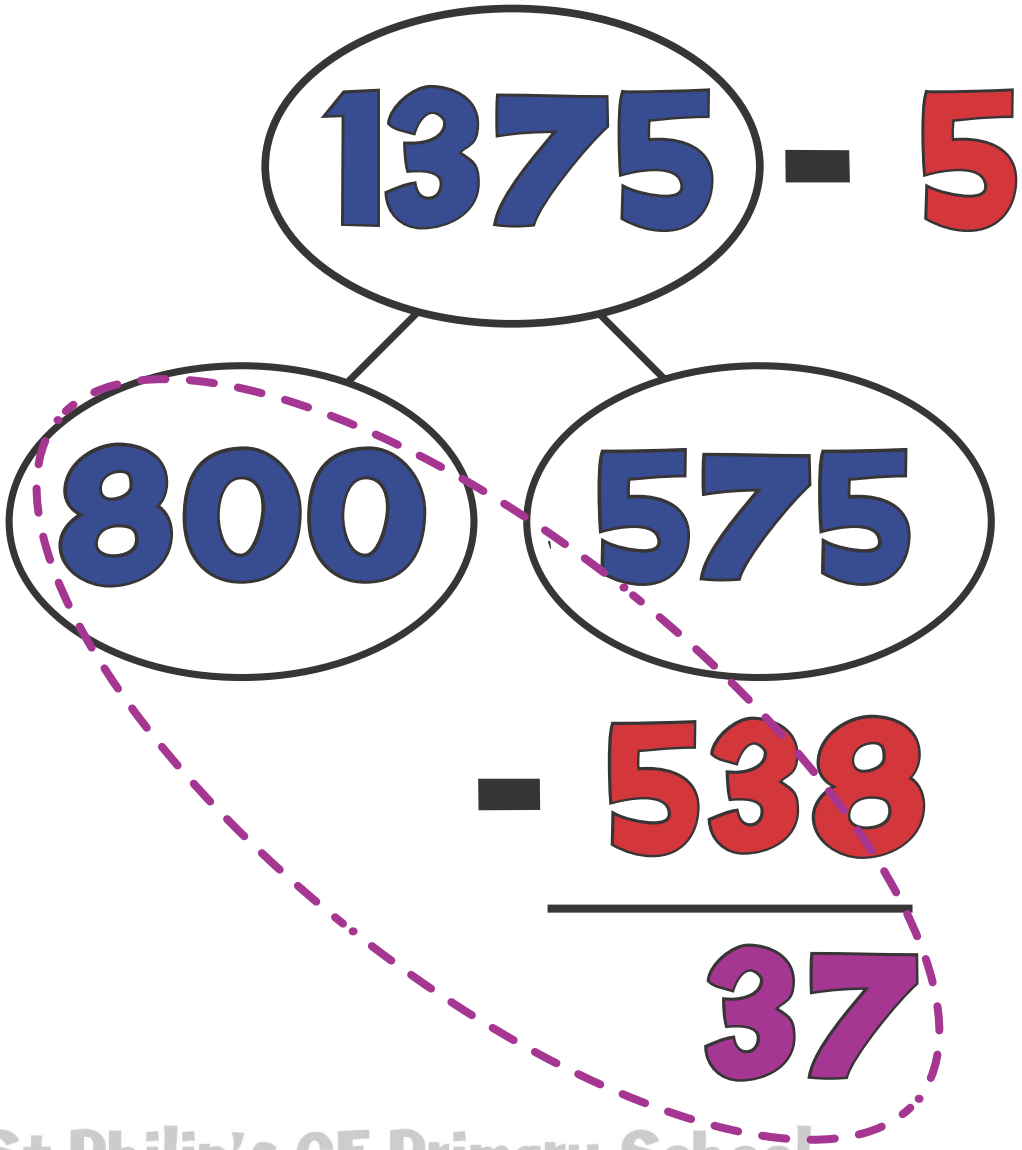
44

44 + 323 = 367

S9f: Part/Whole (M)

4

Partition the Minuend

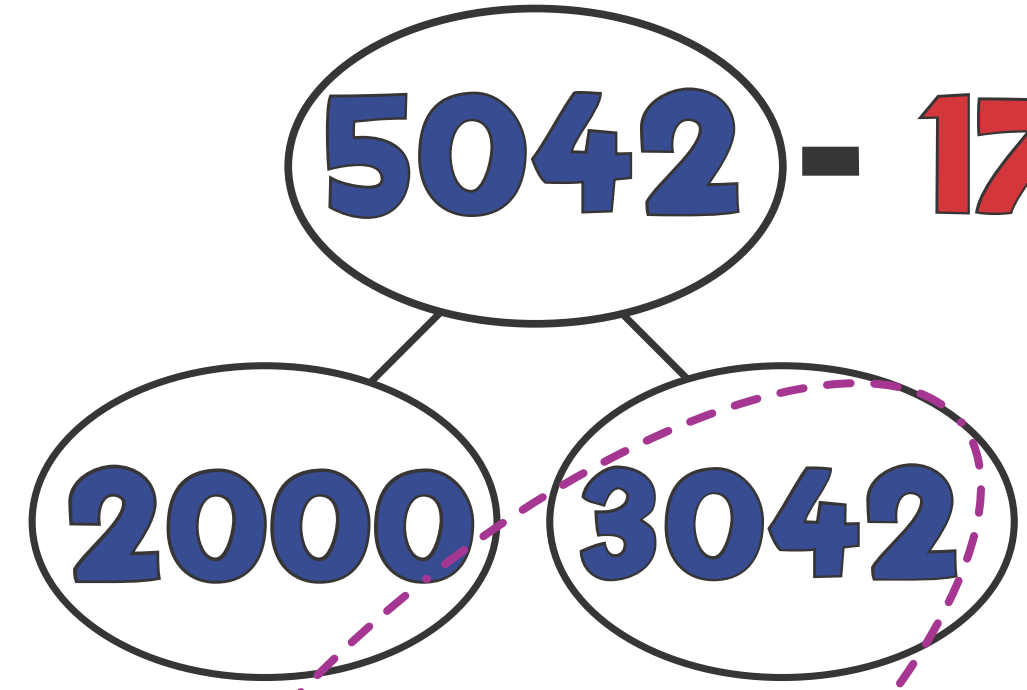


37 + 800 = 837

S9g: Part/Whole (M)

4

Partition the Minuend



5042 - 1776 = 3266

- 1776

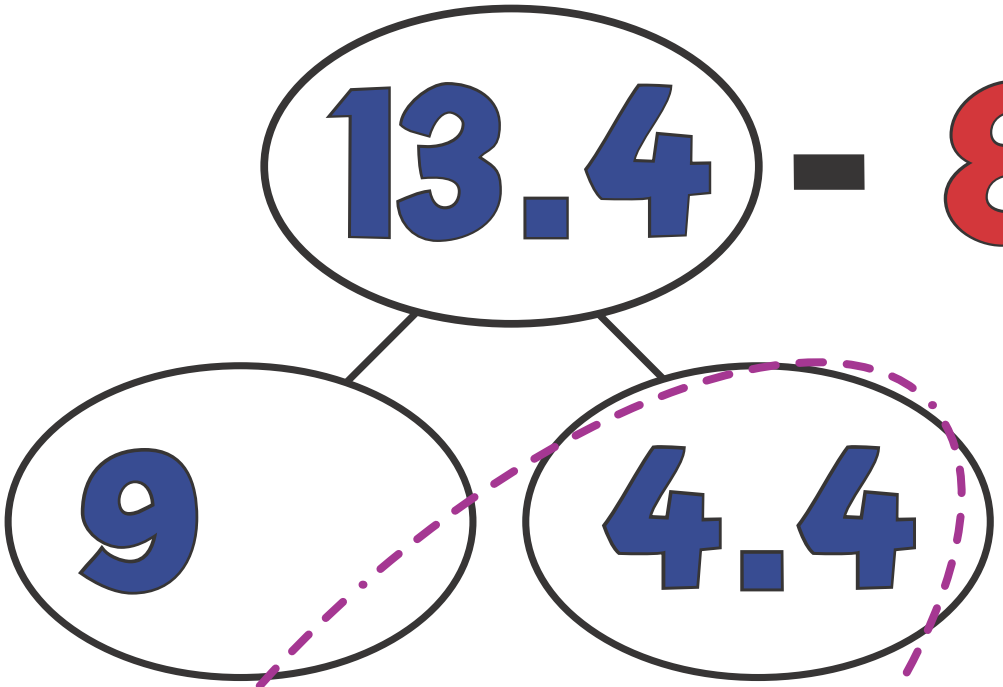
224

224 + 3042 = 3266

S9h: Part/Whole (M)

5

Partition the Minuend



13.4 - 8.7 = 4.7

- 8.7

0.3

0.3 + 4.4 = 4.7

S10: Expanded Column

2

Subtraction

$$87 - 23 = 64$$

80	7
20	3
60	4

S10a: Expanded Column

2

Subtraction

$$75 - 37 = 38$$

$$\begin{array}{rr} {}^{60}\cancel{70} & {}^{1}5 \\ 30 & 7 \\ \hline 30 & 8 \end{array}$$

S10b: Expanded Column Subtraction

3

$$127 - 74 = 53$$

	0	1	
	~~100~~	20	7
−		70	4
		50	3

S10c: Expanded Column Subtraction

3

$$132 - 56 = 76$$

0	120	1
~~100~~	~~30~~	2
−	50	6
	70	6

S10d: Expanded Column

3

Subtraction (100, 10, 1s)

$$736 - 462 = 274$$

	600		1	
	~~700~~		30	6
−	400		60	2
	200		70	4

S10e: Expanded Column

3

Subtraction (100, 10, 1s)

723 - 356 = 367

	600	110	1
	~~700~~	~~20~~	3
-	300	50	6
	300	60	7

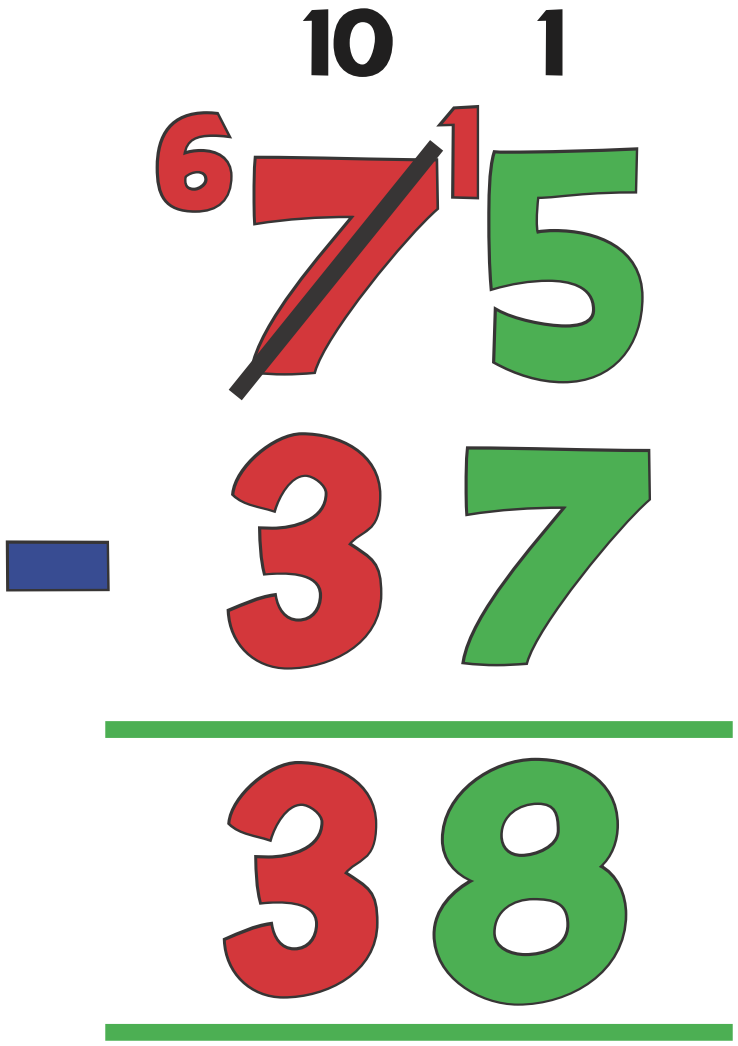
S11: Column Subtraction

2 Additional

	10	1
	8	7
−	2	3
	6	4

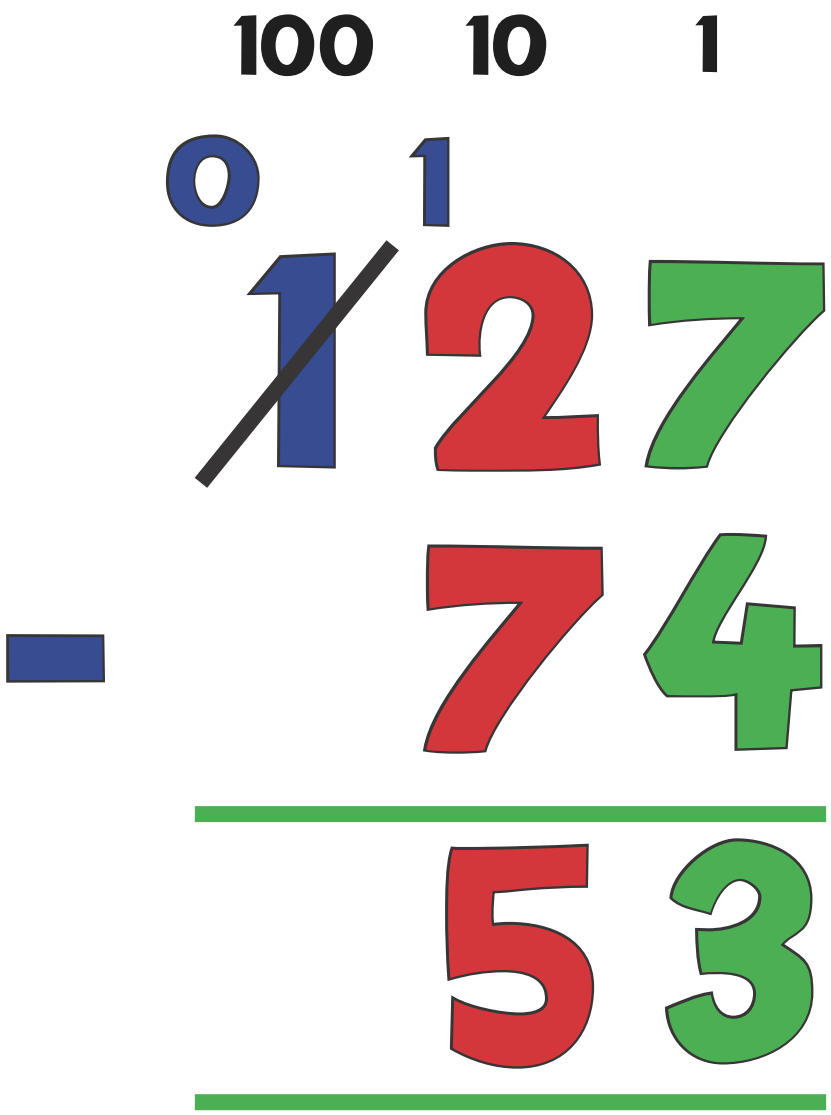
S11a: Column Subtraction

2



S11b: Column Subtraction

3



S11c: Column Subtraction

3

100	10	1
~~1~~ 0	~~3~~ 12	2
−	5	6
	7	6

S11d: Column Subtraction

3

	100	10	1
	6	1	
	~~7~~	3	6
−	4	6	2
	2	7	4

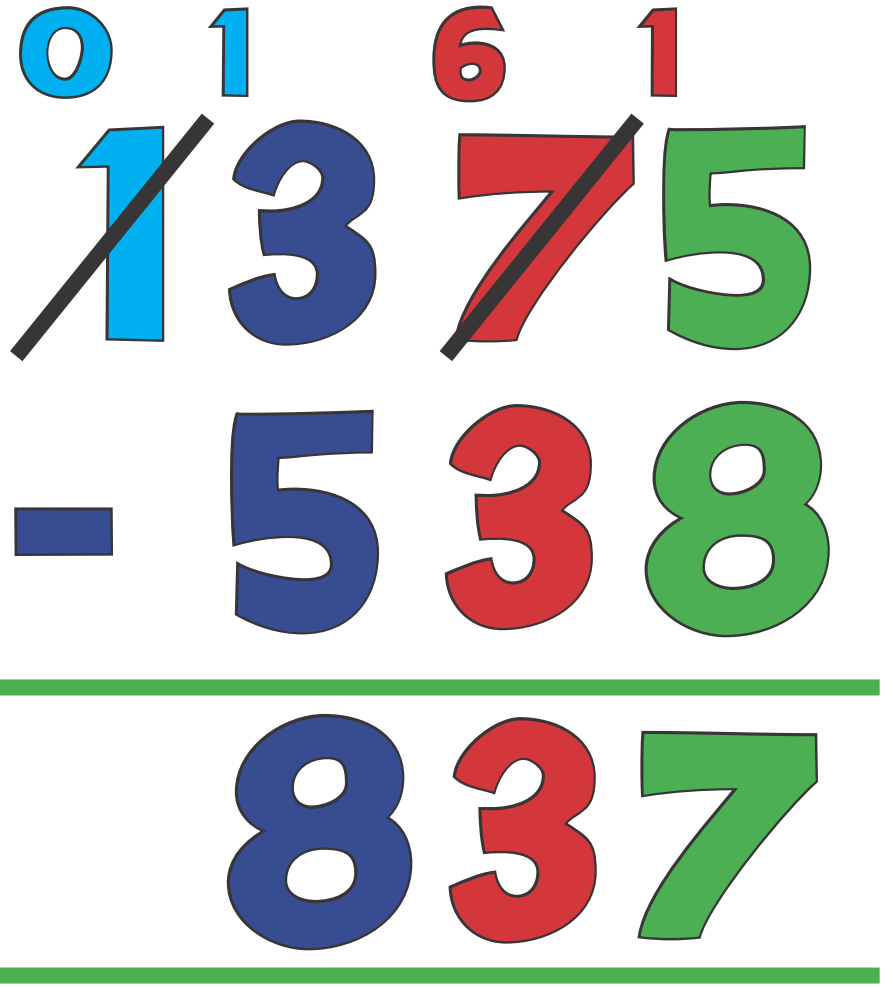
S11e: Column Subtraction

3

100	10	1
6	11	1
7	2	3
− 3	5	6
3	6	7

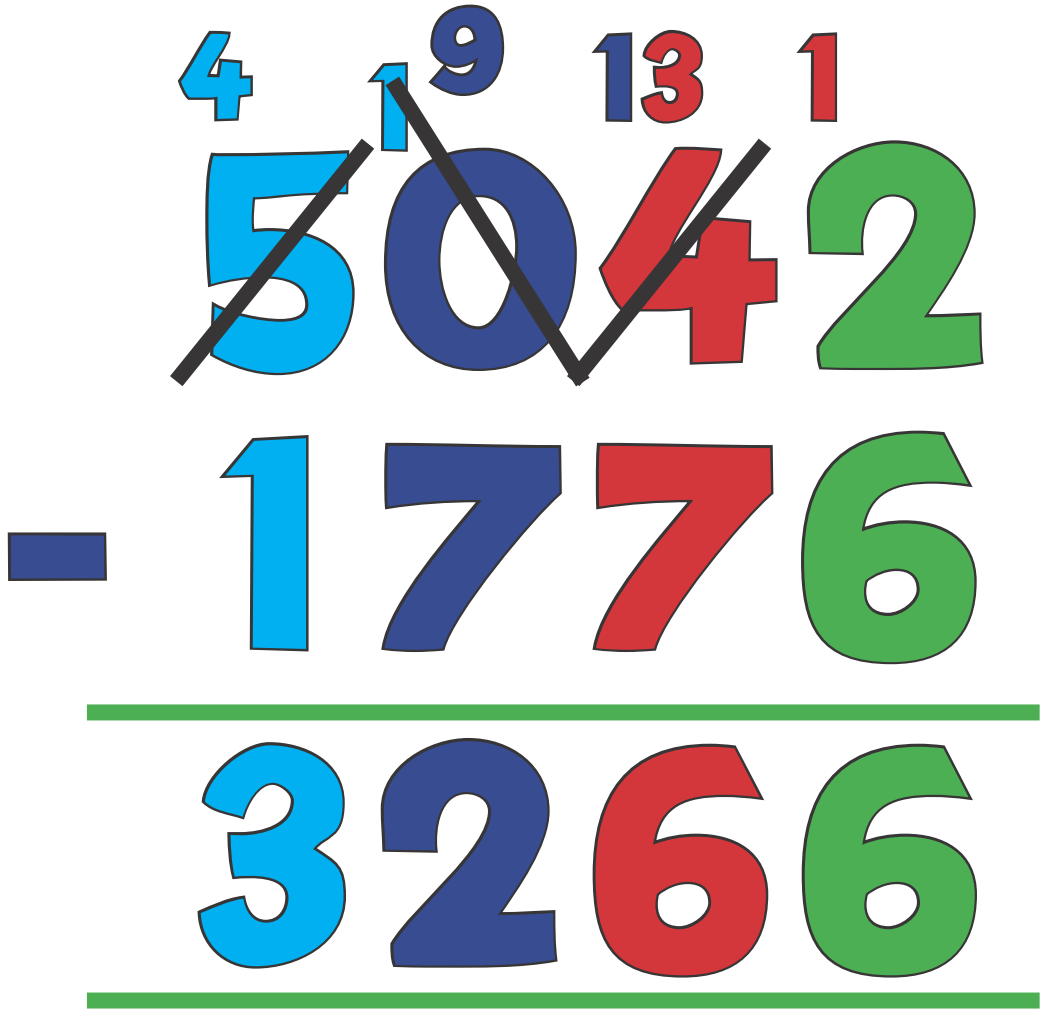
S11f: Column Subtraction

4



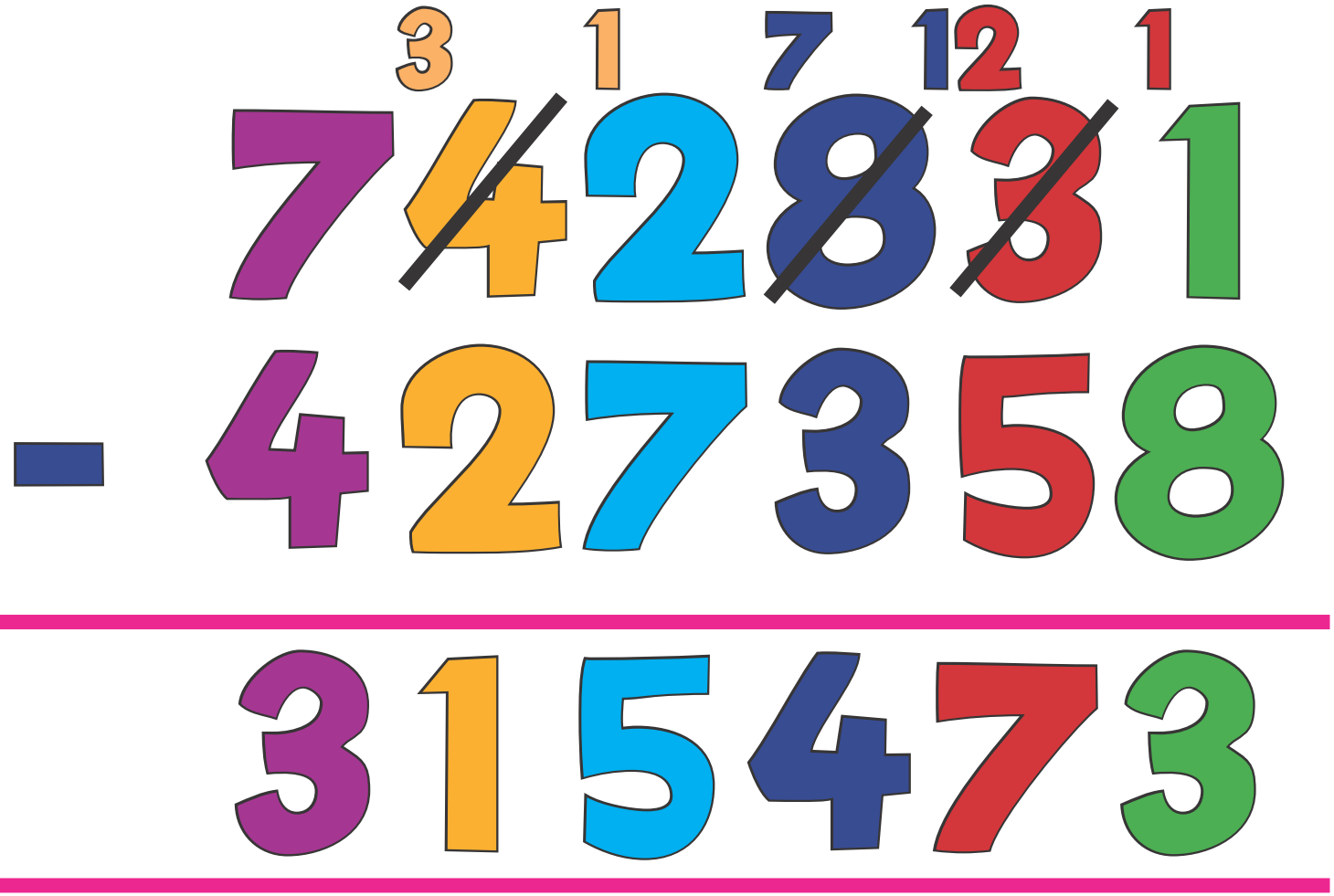
S11g: Column Subtraction

4



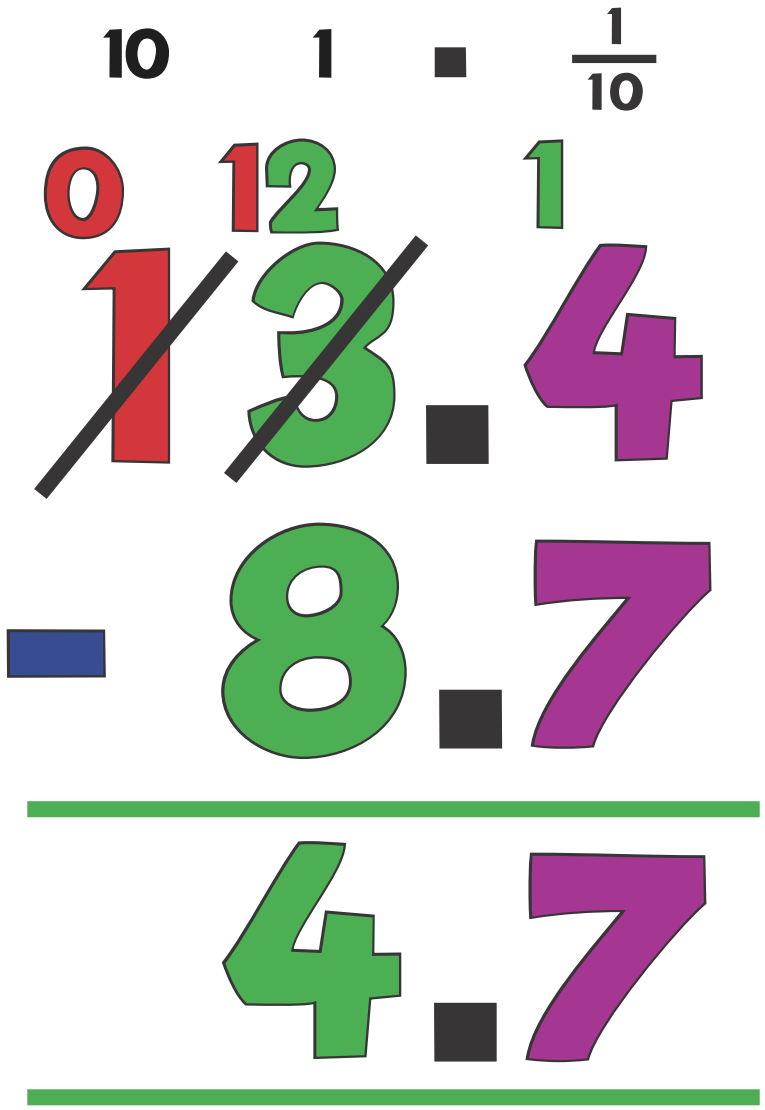
S11h: Column Subtraction

5



S11i: Column Subtraction

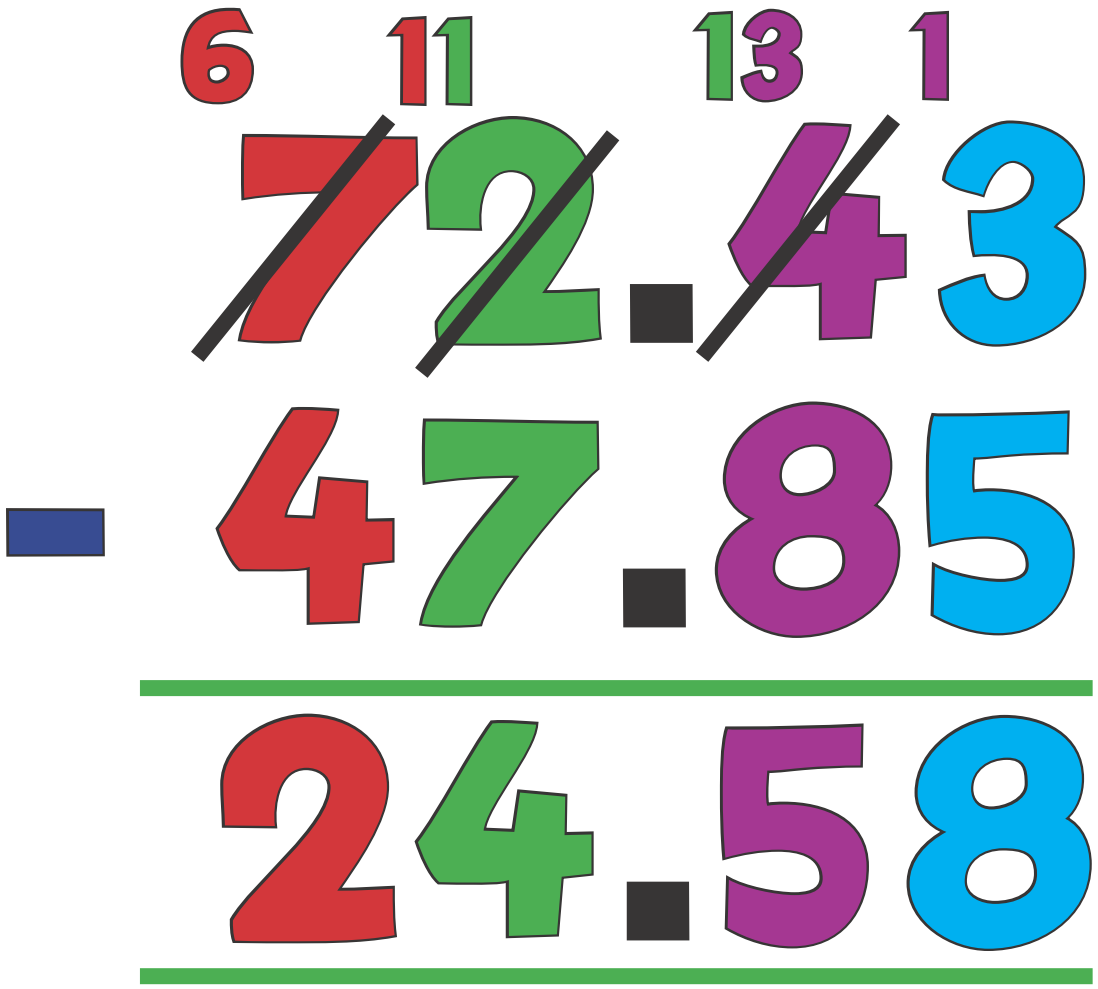
5



S11j: Column Subtraction

5

10 1 . $\frac{1}{10}$ $\frac{1}{100}$



S11k: Column Subtraction

5

With Decimals

$$12.4 - 5.97 = 6.43$$

10	1	.	$\frac{1}{10}$	$\frac{1}{100}$
0	11		13	1
~~1~~	~~2~~	.	~~4~~	0
−	5	.	9	7
	6	.	4	3