Sense of Number

Visual Calculation Policy

Basic Edition for

Saint Mary's Catholic Primary School

May 2016

Graphic Design by Dave Godfrey

Compiled by the Sense of Number Maths Team

For sole use within Saint Mary's Catholic Primary School.

'A picture is worth 1000 words!'

www.senseofnumber.co.uk

Poster Guide

Visual Calculation Policy

Code	Section	Basic Edition (99 Slides)		Expanded Edition (316 Slides)	
		How many posters?	Slide Numbers	How many posters?	Slide Numbers
	Introduction Slides	3	1-3	3	1-3
KS	KS: Key Concepts	7	4-10	7	4-10
	Vocabulary Slides	9	11-19	9	11-19
C	Counting Policy	-	-	13	21-33
A	Addition	7	20-26	40	34-73
MA	Mental Addtion	5	27-31	40	74-113
S	Subtraction	11	32-42	33	114-146
MS	Mental Subtraction	-	-	4	147-150
M	Multiplication	9	43-51	32	151-182
MM	Mental Multiplication	1	52	30	183-212
D	Division	14	53-66	41	213-253
	Calculation Cards	-	-	9	254-262
	Multiplication Tables	-	-	11	263-273
	Expanded Edition Progression (Year groups for New Curriculum)	13	67-79	19	274-291
	Alternative layouts (Column and Subtraction on a Number Line)	11	80-90	29	292-321

Guide to using a Visual Calculation Policy

The Sense of Number Visual Calculation Policy provides a visual representation of a school's written and mental calculation policy.

Typical uses:

Classoom: The slides are printed out (e.g. A4) and the appropriate slides are displayed within each classroom for continual reference or on a working wall.

Teacher Reference: The slides are printed out (e.g. 9 slides per A4 page) and inserted in the teacher's planning folder.

Parents: The slides are used to communicate to parents the methods being taught and used within school.

Website: Slides from the VCP are inserted on a schools' maths webpages.

(Please note: the VCP should not be made available for download)

KC1: Key Concepts!

Addition

+

8 + 2 = 10

"What is 8 add 2?"
Answer: 10

Subtraction

−

8 - 2 = 6

"What is 8 subtract 2?"
Answer: 6

"The difference between 8 and 2 is 6"

KC2: Key Concepts!

Multiplication

×

8 x 2 = 16

"8 multiplied by 2" means
"8, 2 times" or
"2 groups of 8"

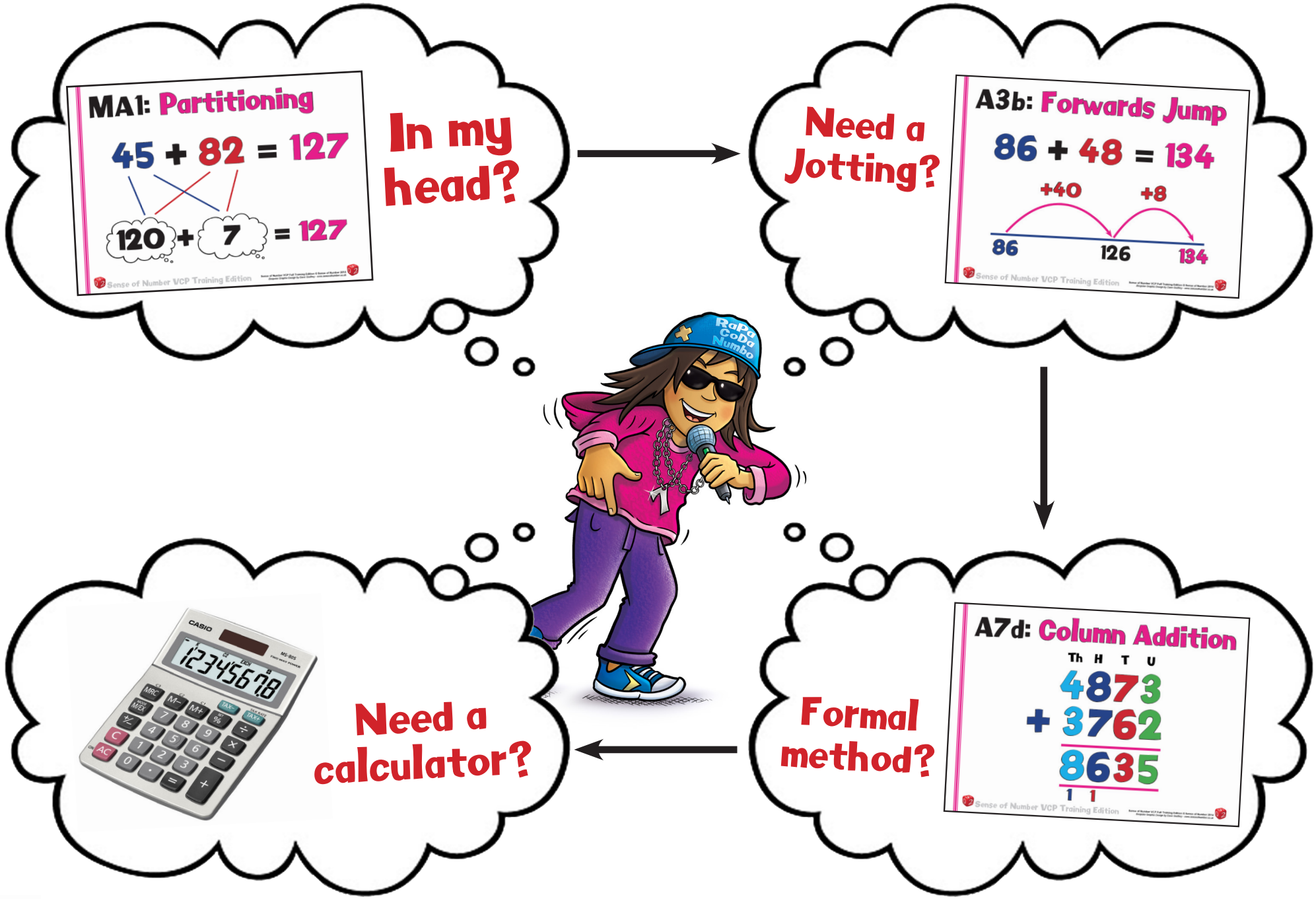
Division

÷

8 ÷ 2 = 4

"8 divided by 2" means "How many groups of 2 are there in 8?" Answer: 4

("8 shared into 2 sets is 4")



1

Can I do this in my head?

2

Do I need to use a drawing or a jotting?

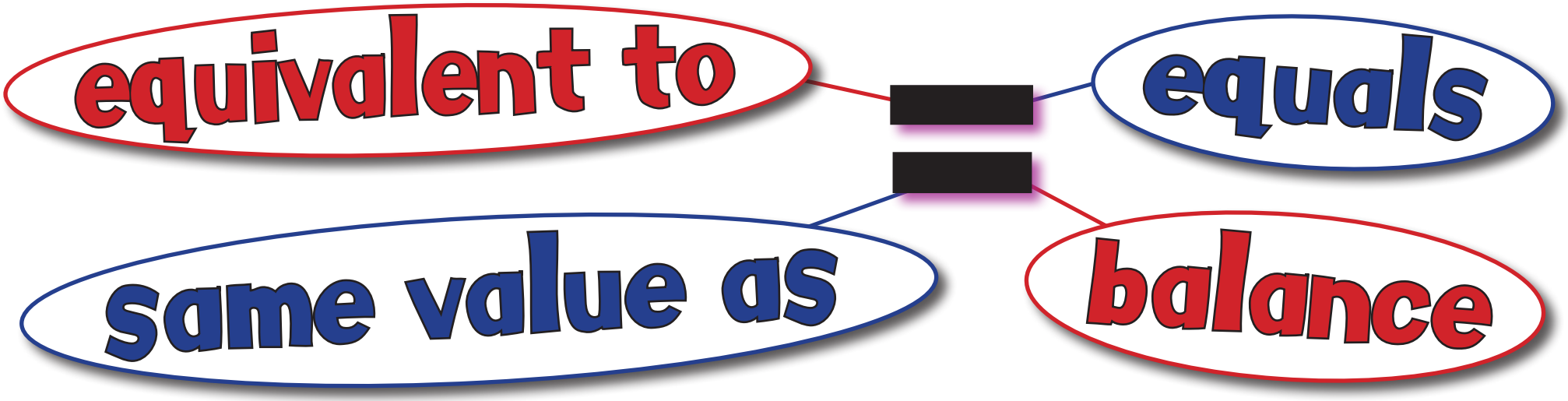
3

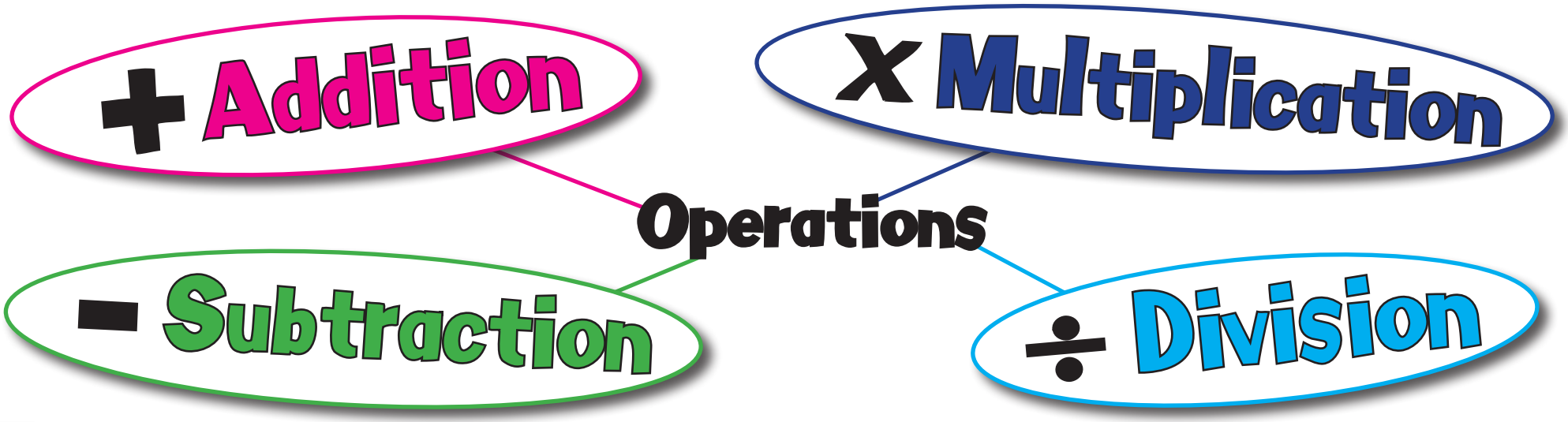
Do I need an expanded or a standard method?

4

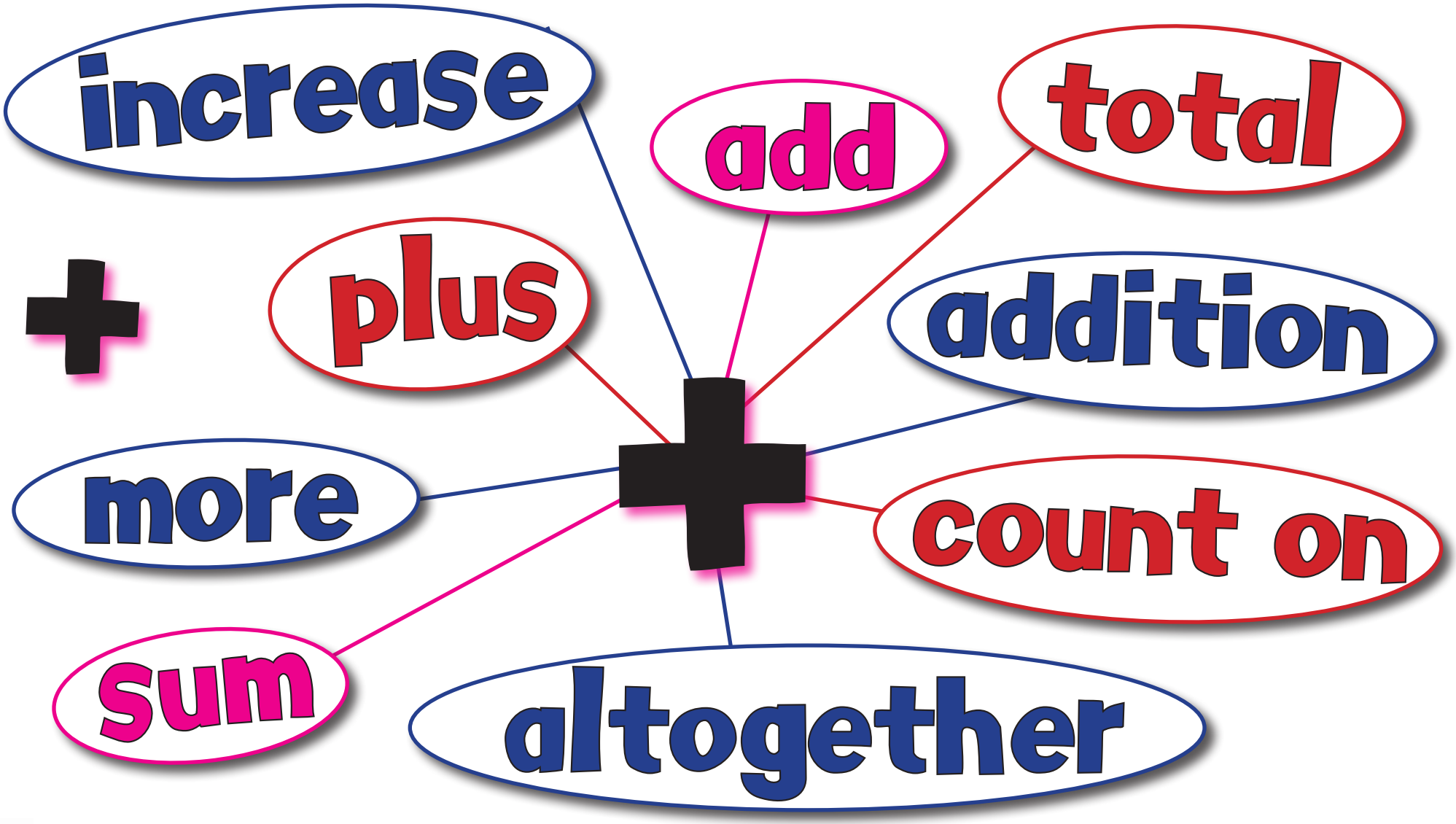
Do I need a calculator?

Calculation Vocabulary

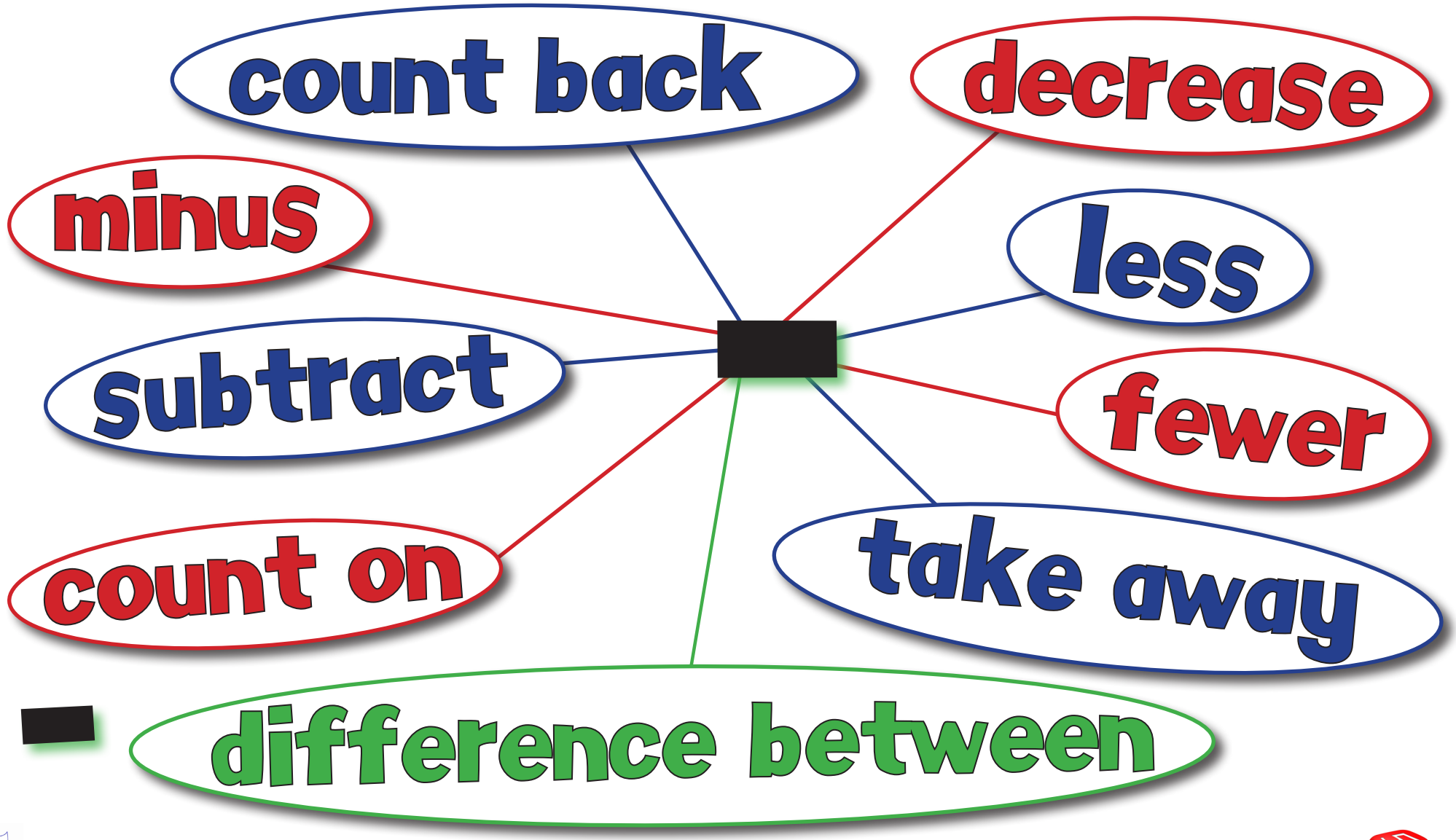




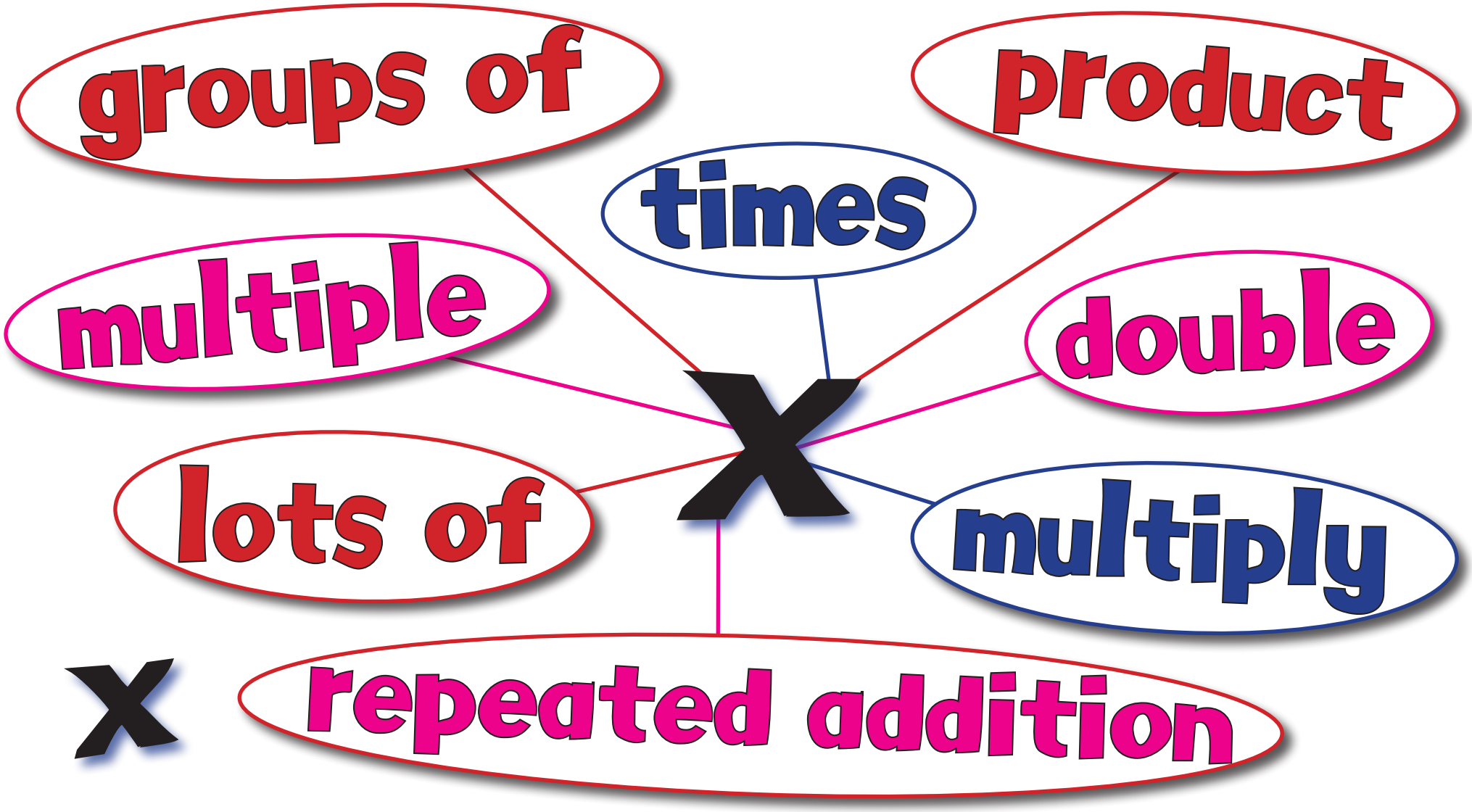
Addition Vocabulary



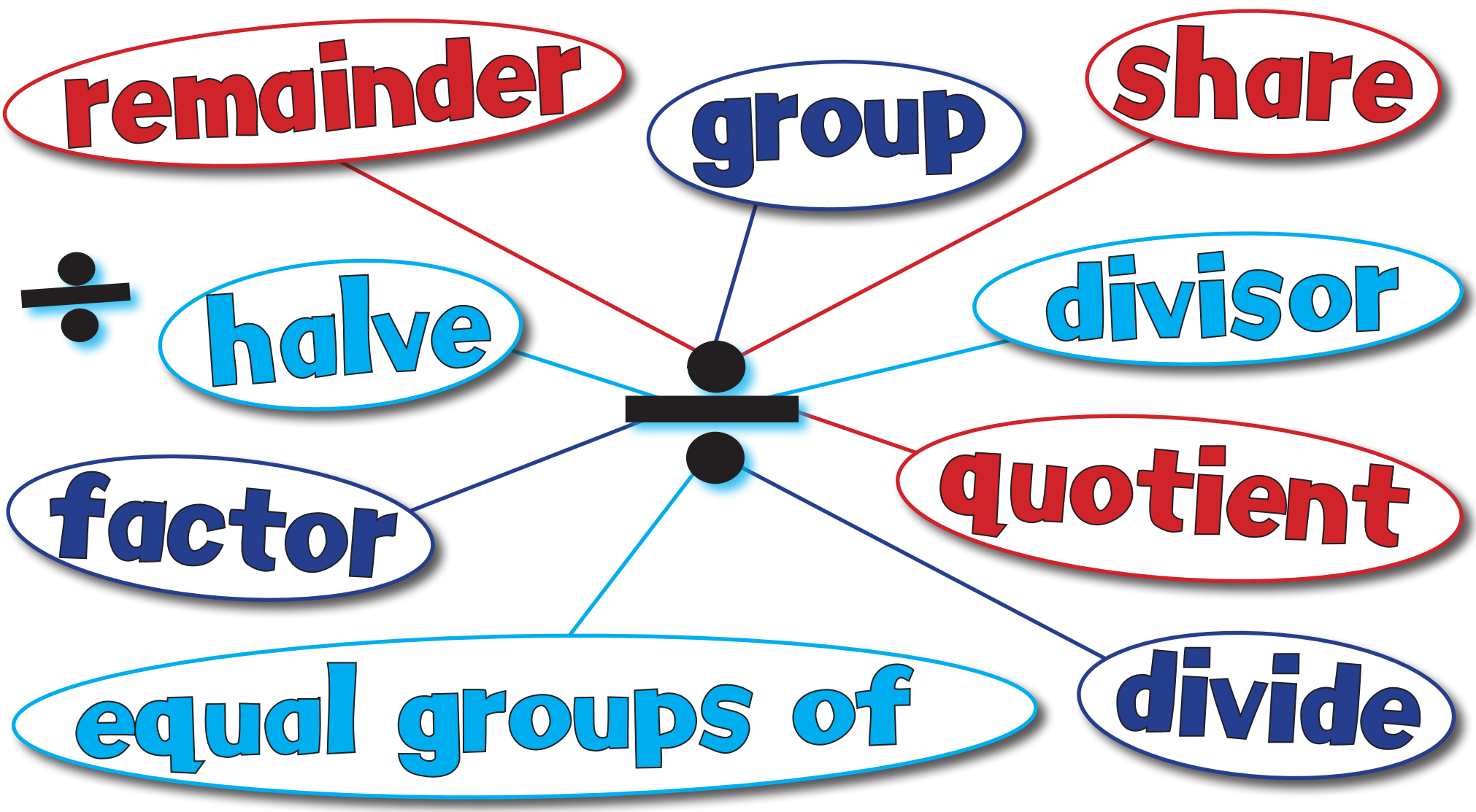
Subtraction Vocabulary



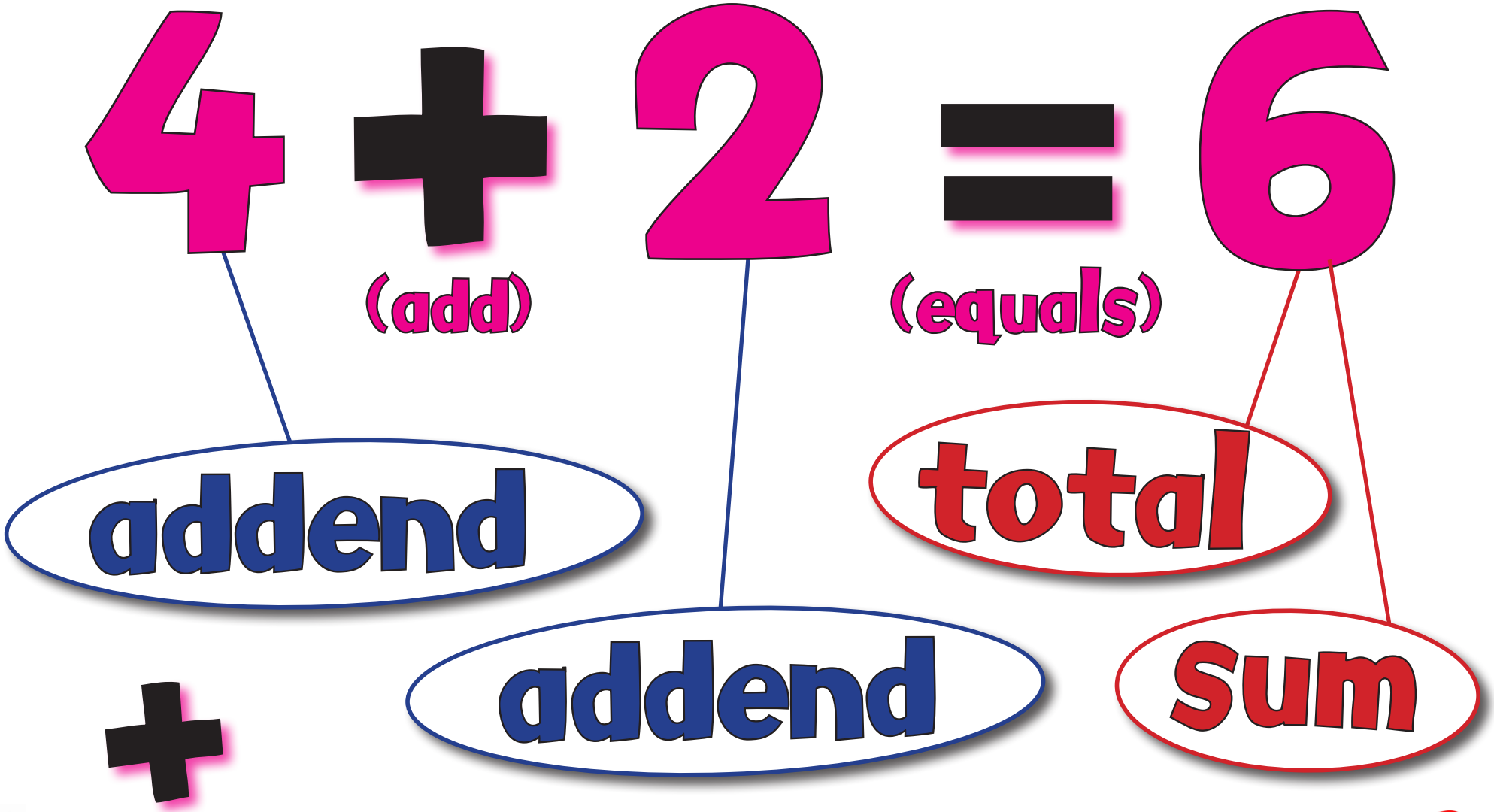
Multiplication Vocabulary



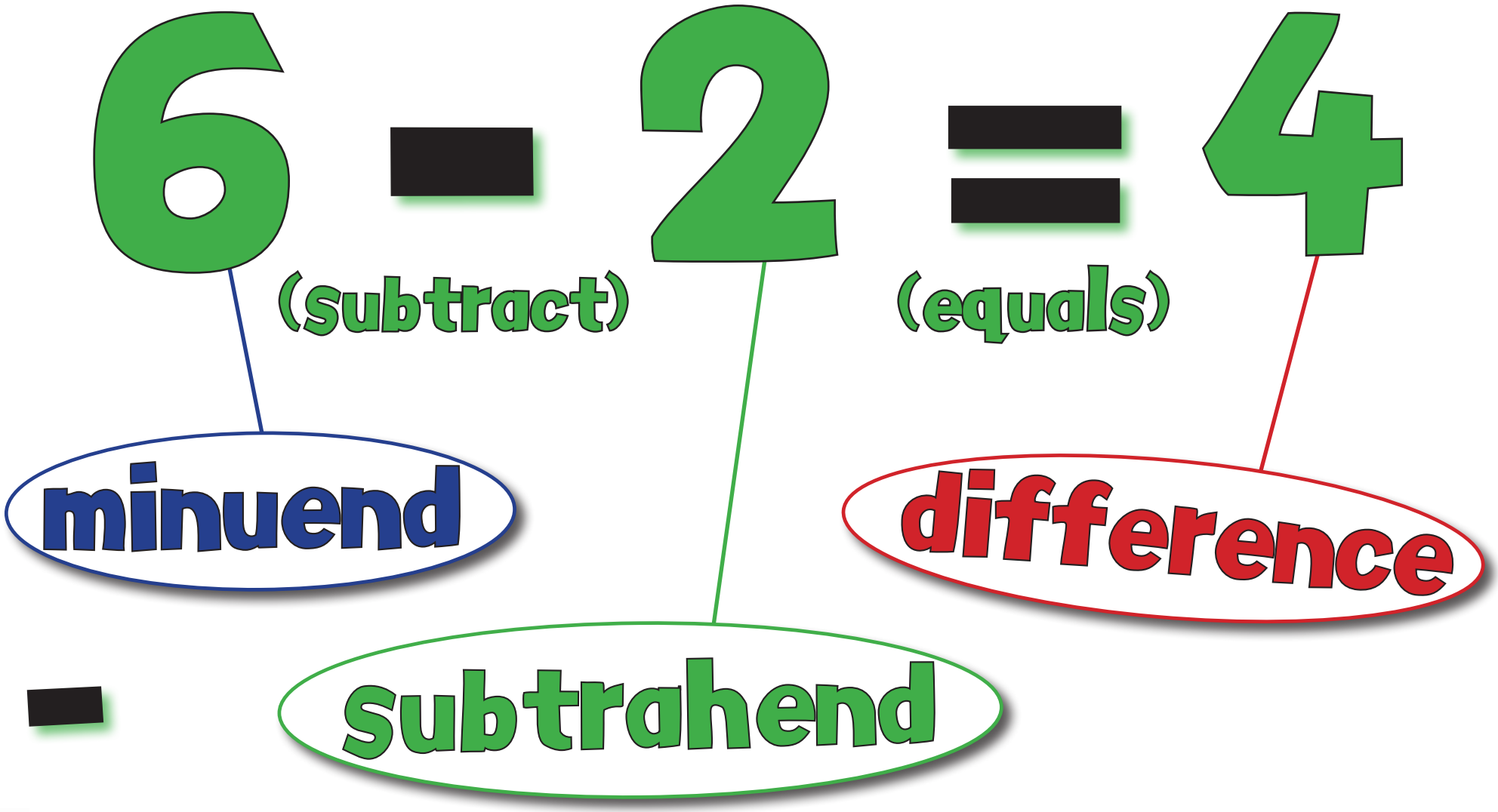
Division Vocabulary



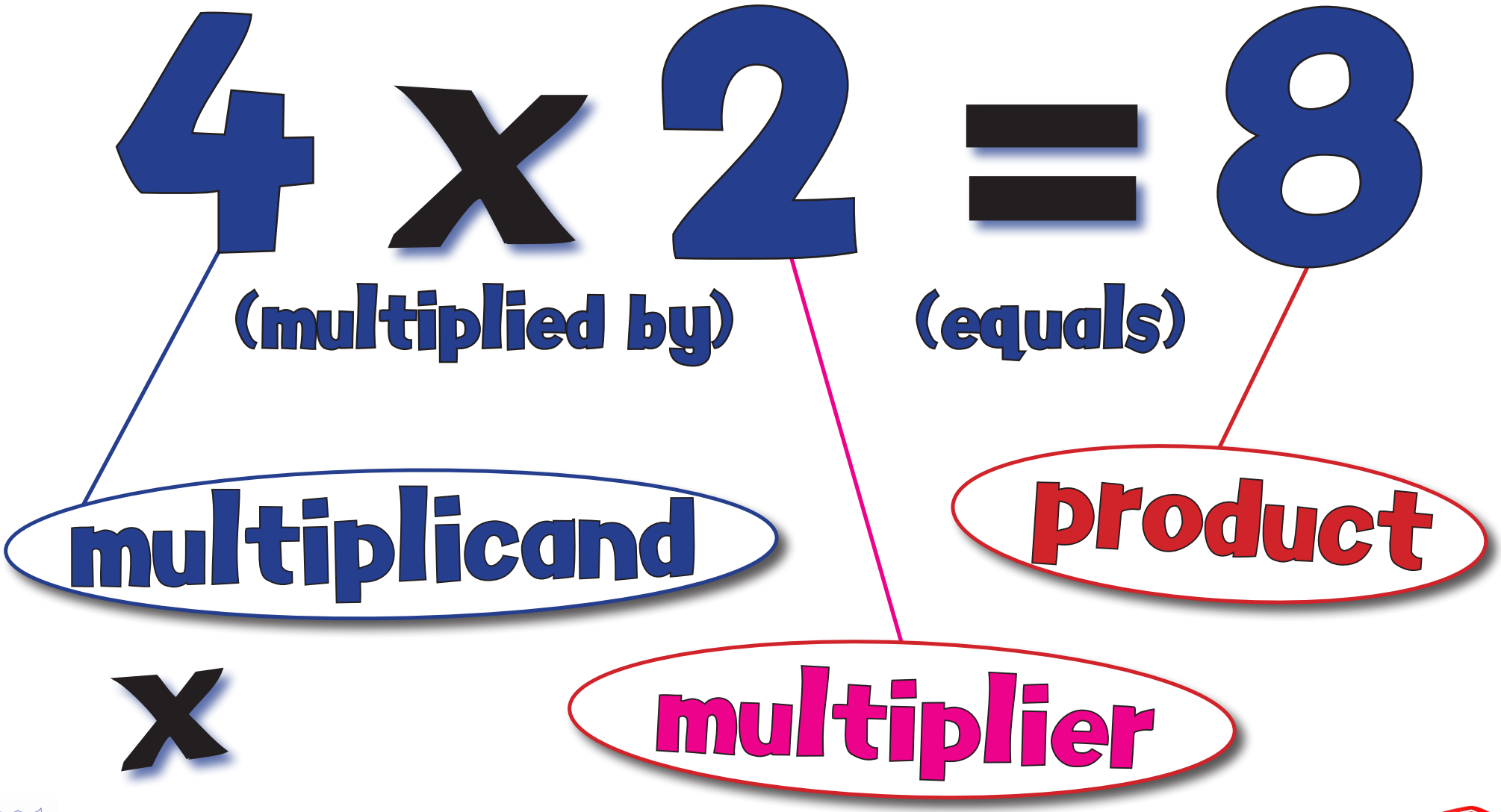
Addition Calculation



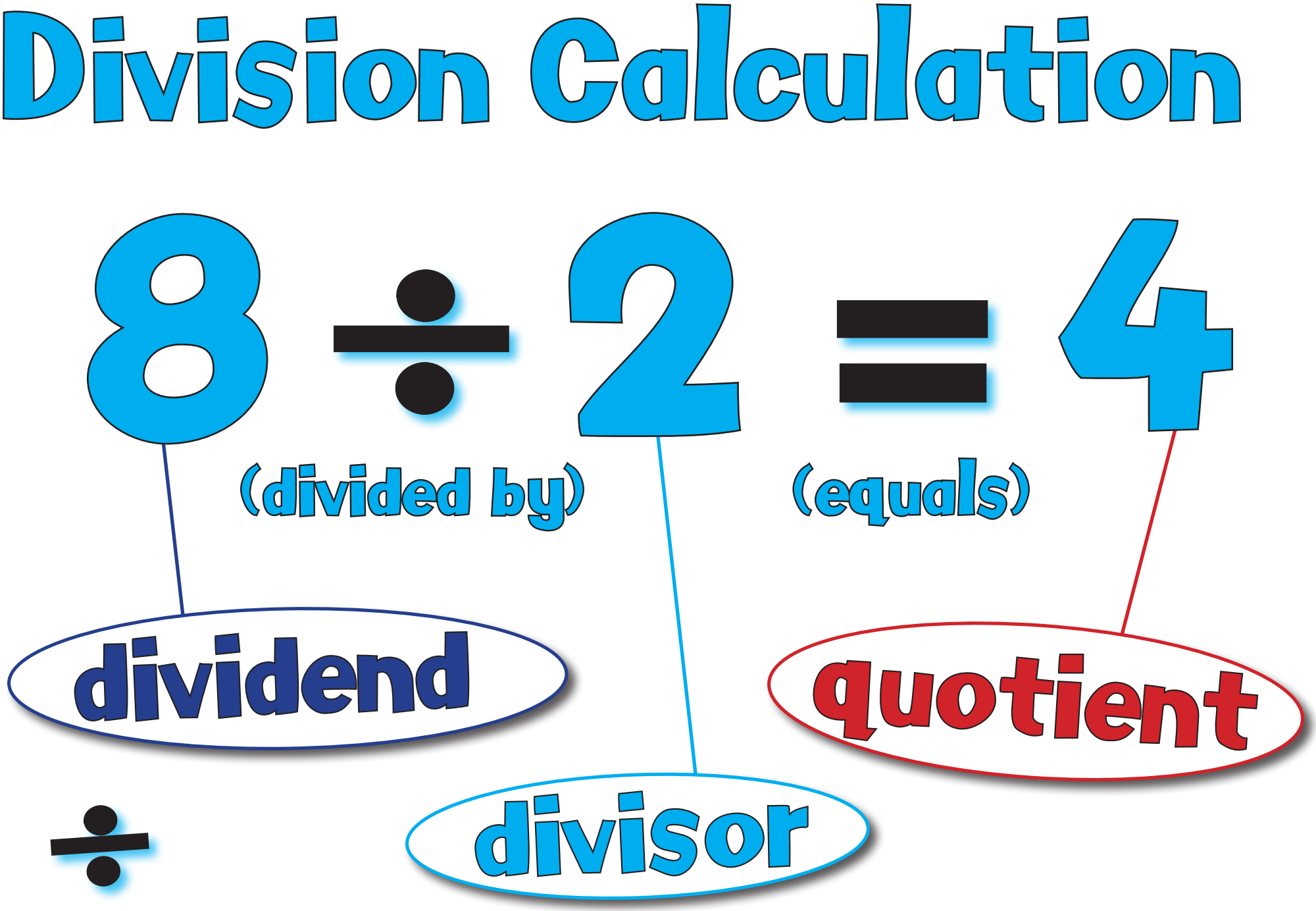
Subtraction Calculation



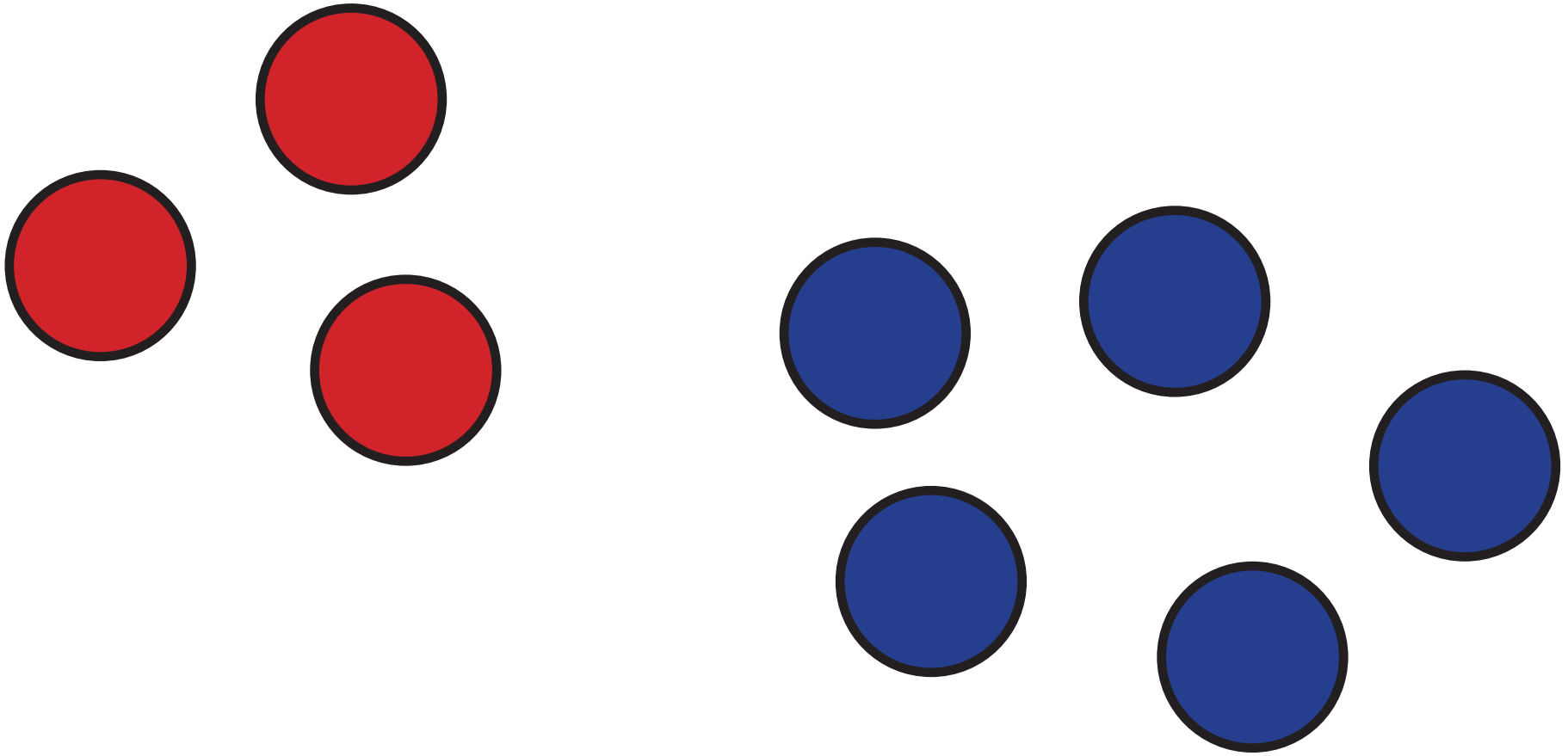
Multiplication Calculation



Division Calculation

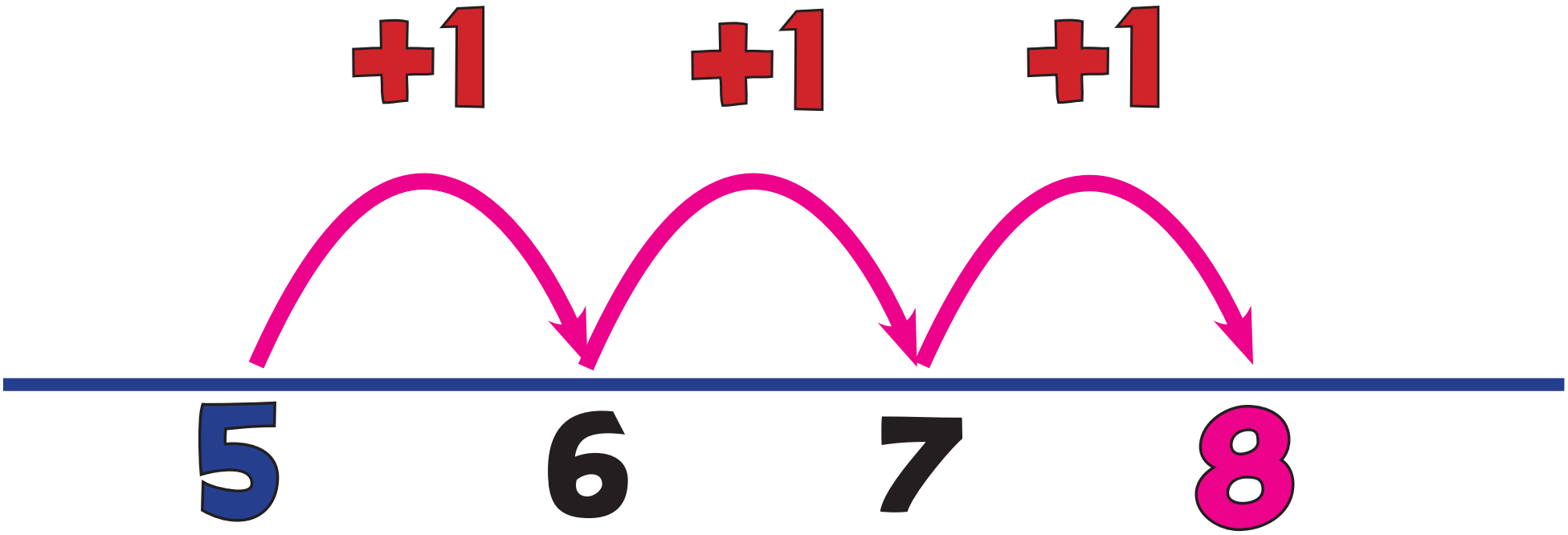


A1: Objects & Pictures



"If I have 3 and then 5 more, how many altogether? Answer: 8"

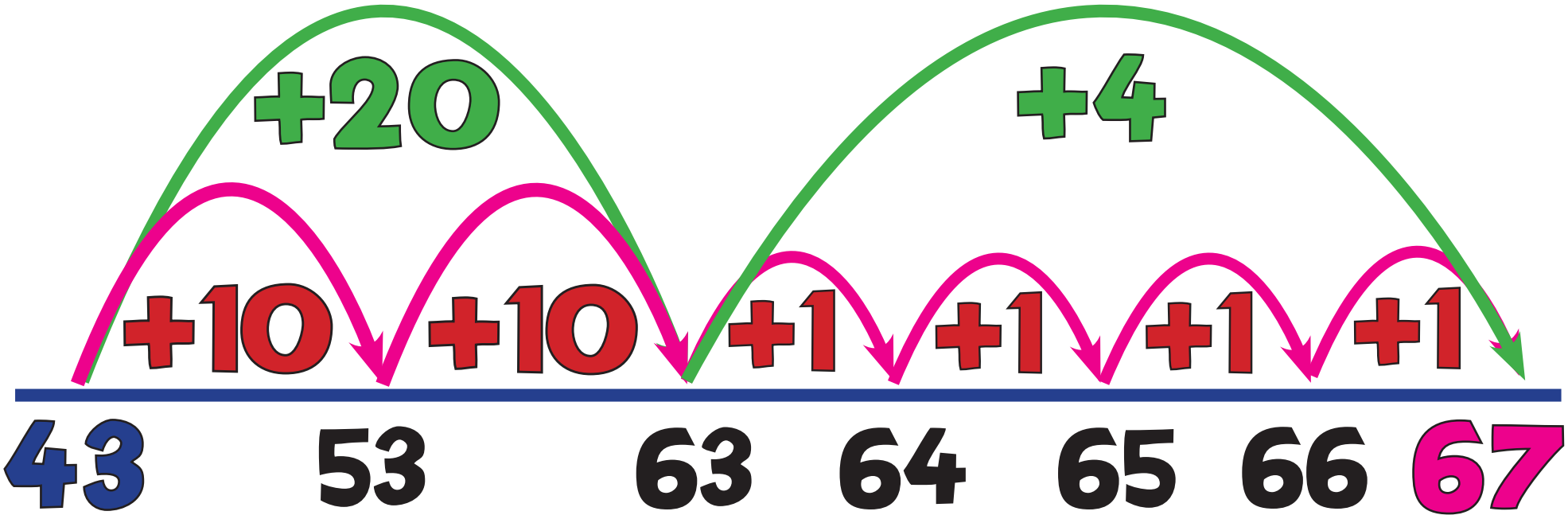
A2: Counting On



$$5 + 3 = 8$$

A3: Forwards Jump

43 + 24 = 67



A4: Partitioning

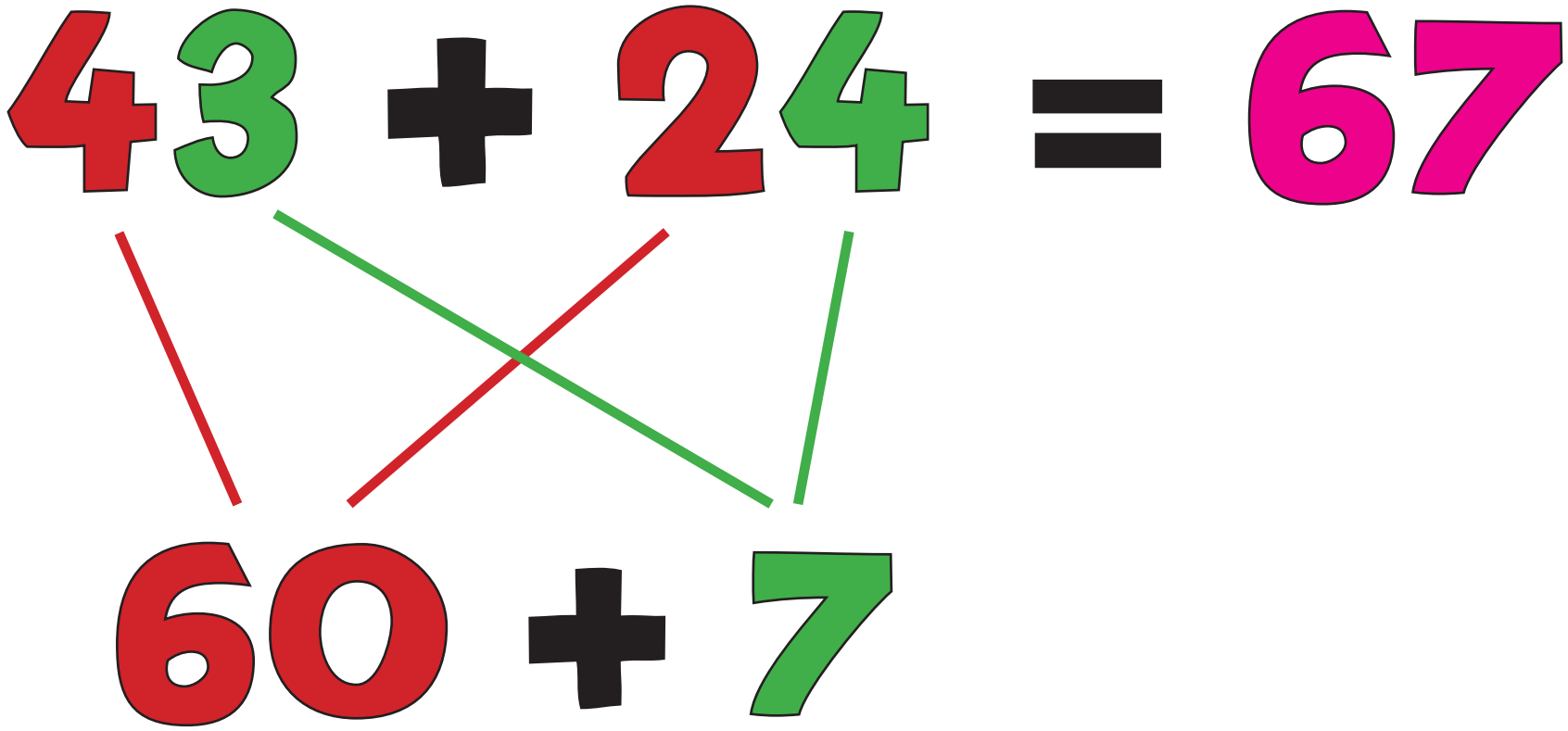
$$43 + 24 = 67$$

$$40 + 20 = 60$$

$$3 + 4 = 7$$

$$60 + 7 = 67$$

A5: Partition Jot



A6: Expanded Column Addition

	100	10	1
	6	8	7
+	2	4	8
			15
	1	20	
	800		
	9	35	

A7: Column Addition

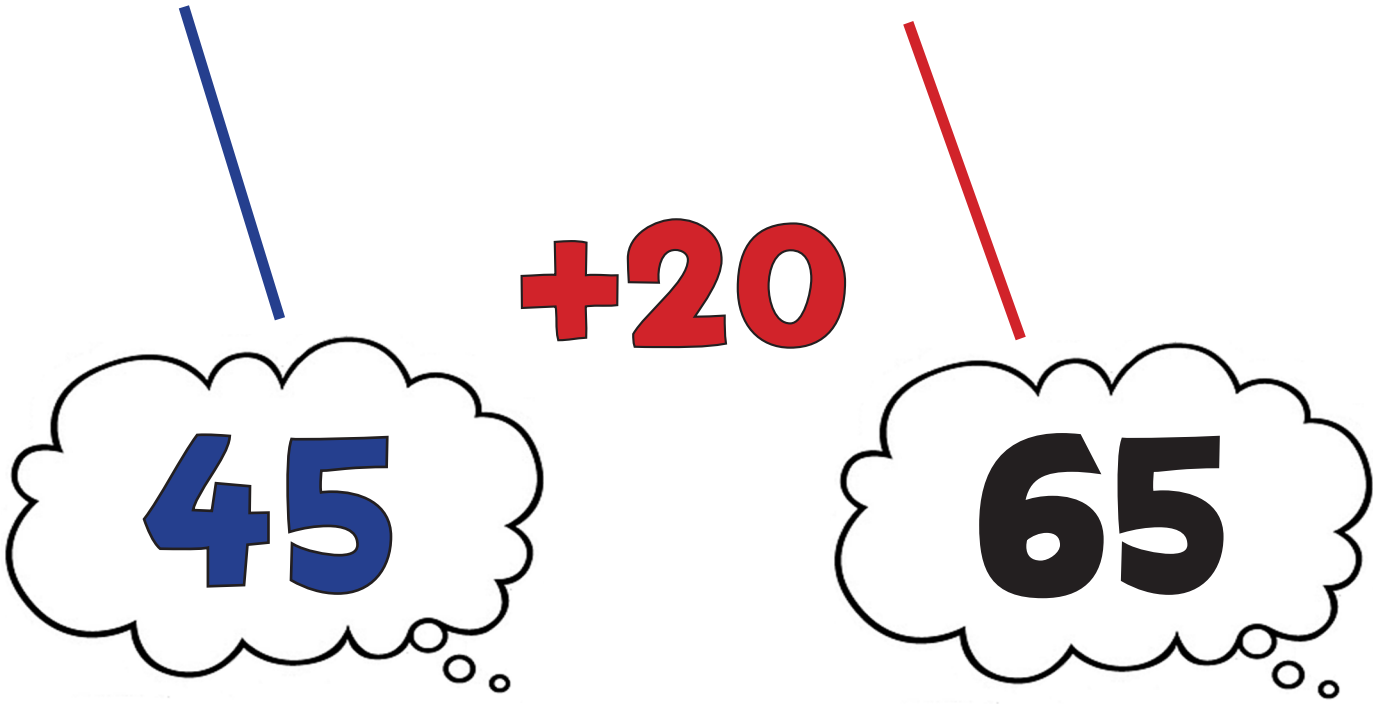
	100	10	1
	6	8	7
+	2	4	8
	9	3	5
	1	1	

MA1: Partitioning

45 + 82 = 127

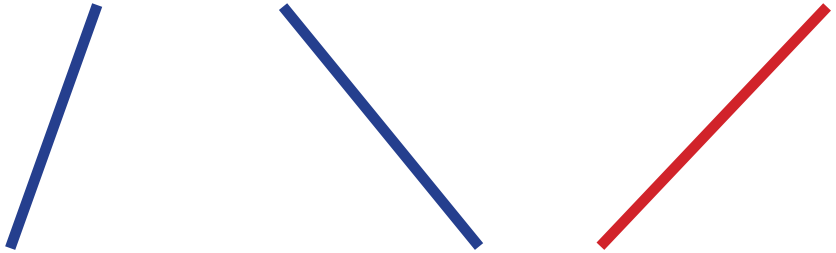
MA2: Counting On

$$45 + 20 = 65$$



MA3: Number Bonds

45 + 95 = 140



40 + 100 = 140

MA4: Double & Adjust

45 + 46 = 91

45 + 45 + 1

90 + 1 = 91

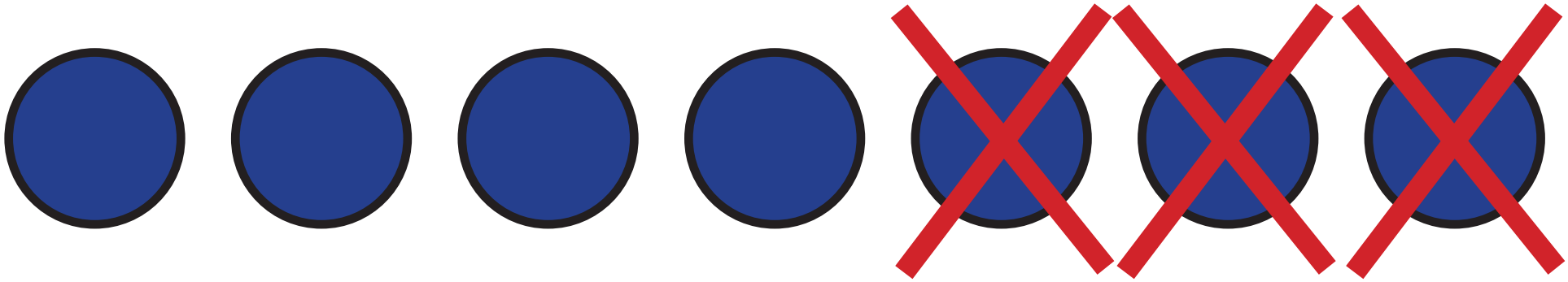
MA5: Round & Adjust

$$45 + 39 = 84$$

$$45 + 40 - 1$$

$$85 - 1 = 84$$

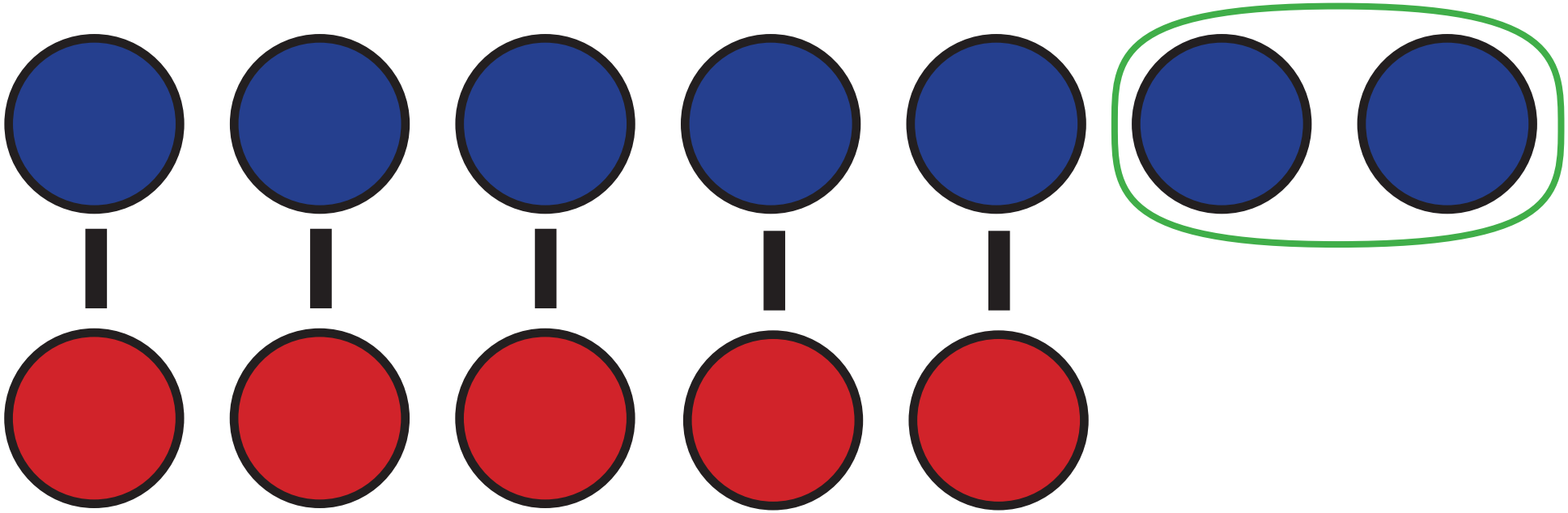
S1: Objects



7 - 3 = 4

"What do I get if I take 3 away from 7? Answer: 4"

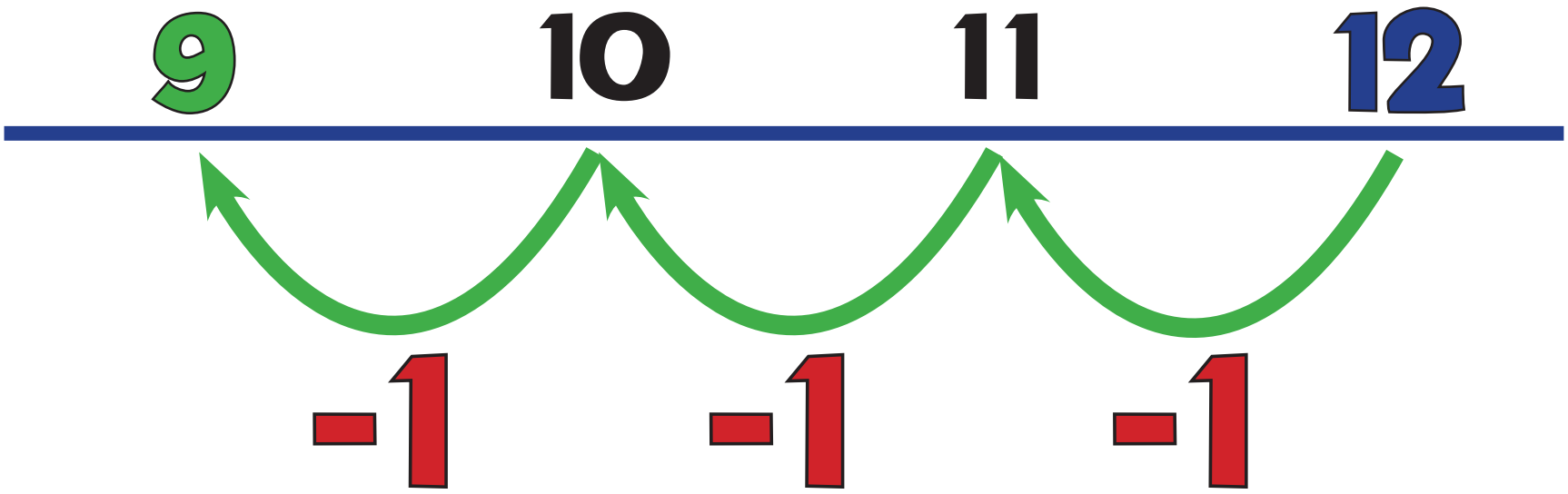
S2: What's the Difference?



7 - 5 = 2

"How many more is 7 than 5? What is the difference?"

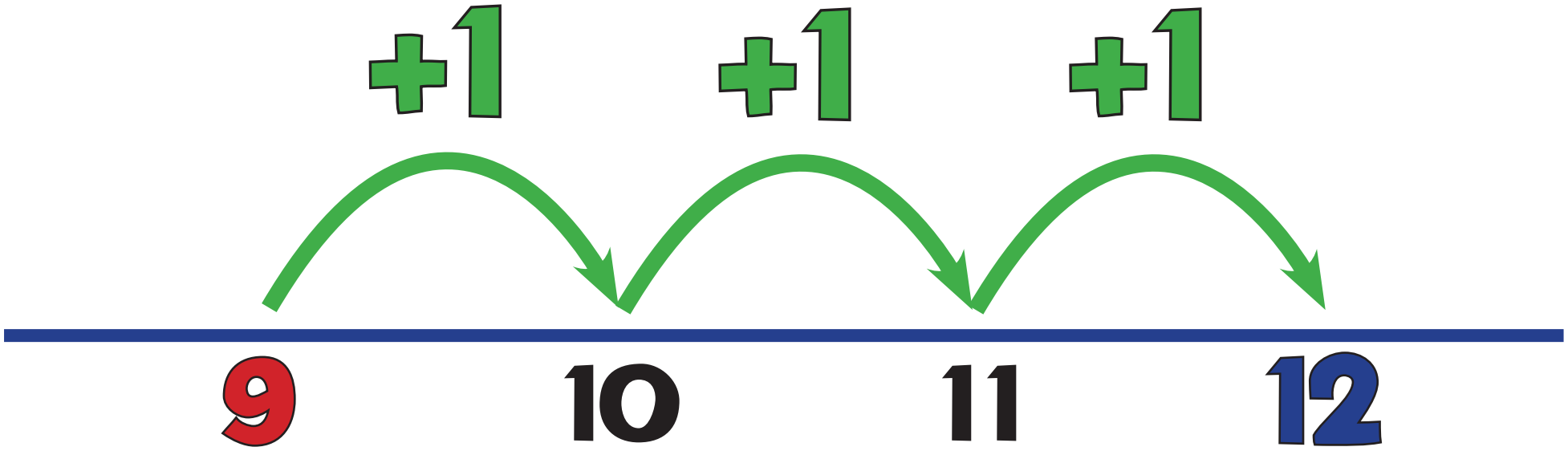
S3: Counting Back



12 - 3 = 9

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

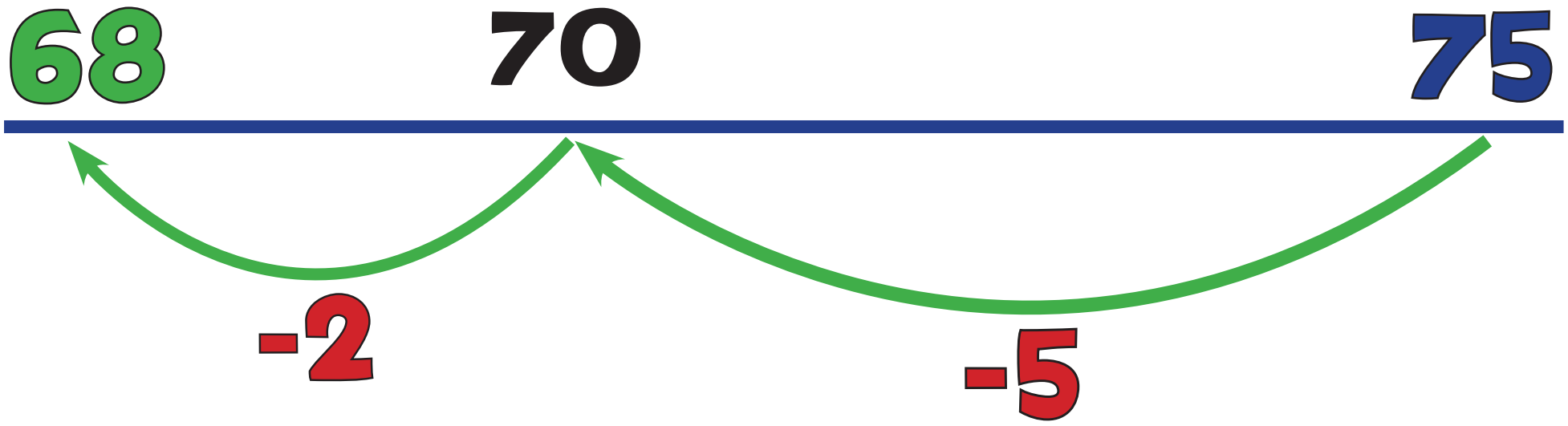
S4: Counting On



12 - 9 = 3

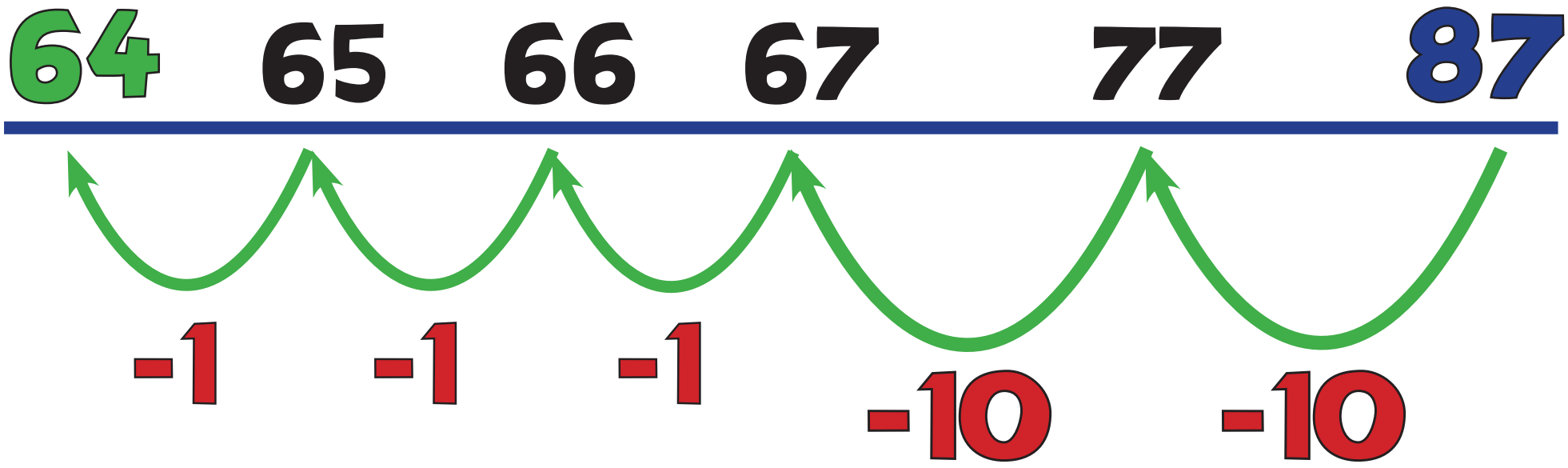
"How many more is 12 than 9? What is the difference?"

S5: Backwards Boing



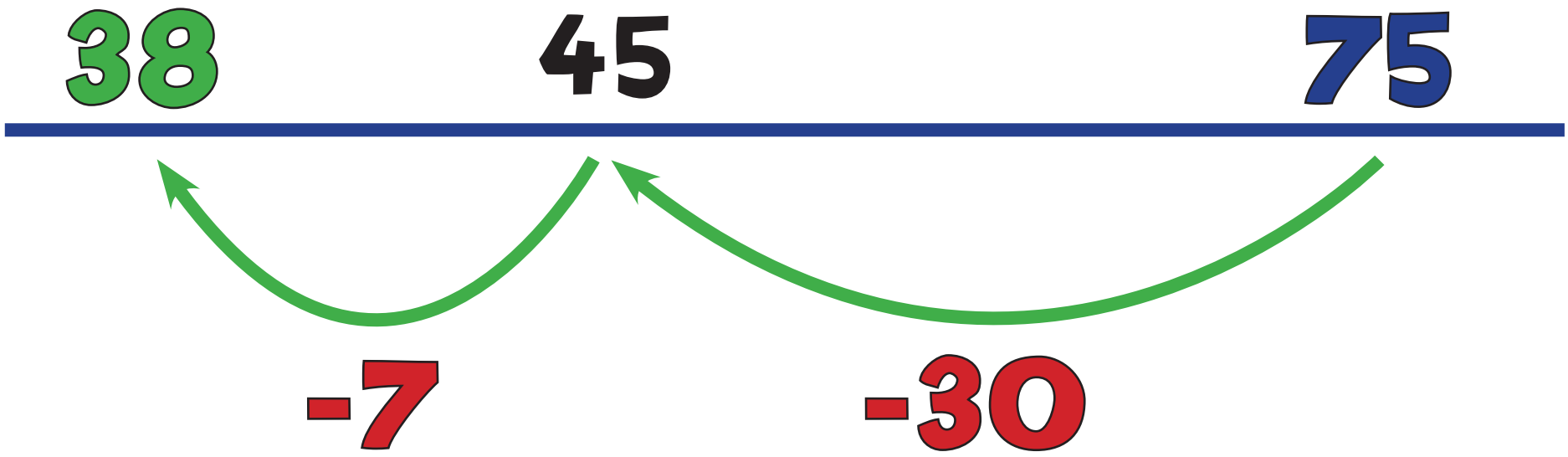
75 - 7 = 68

S6: Backwards Bounce



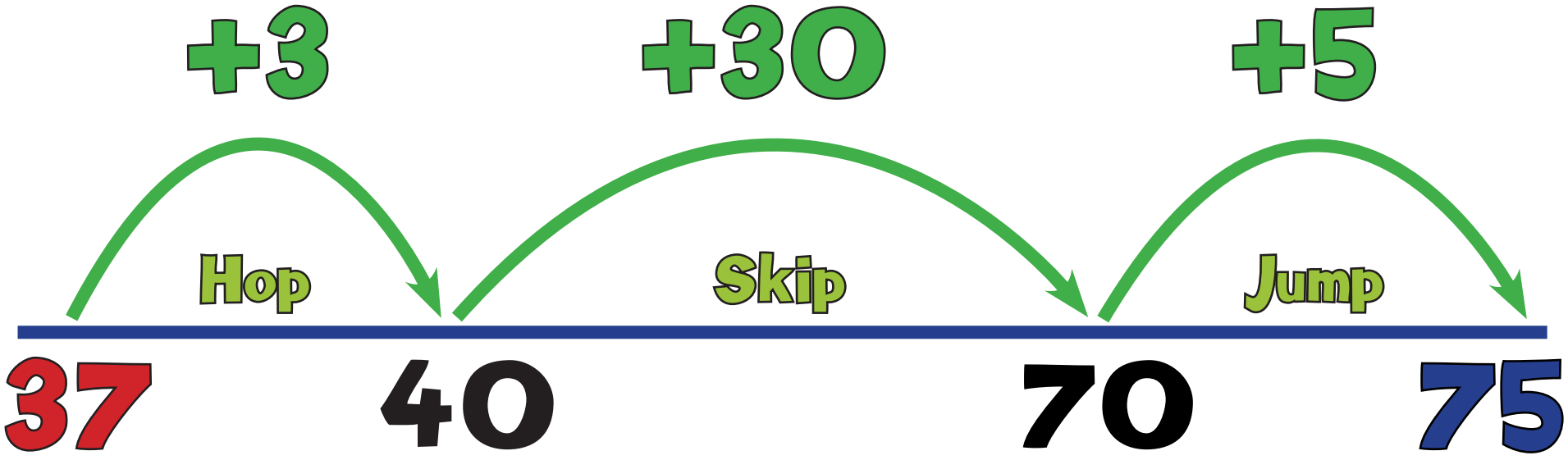
87 - 23 = 64

S7: Backwards Jump



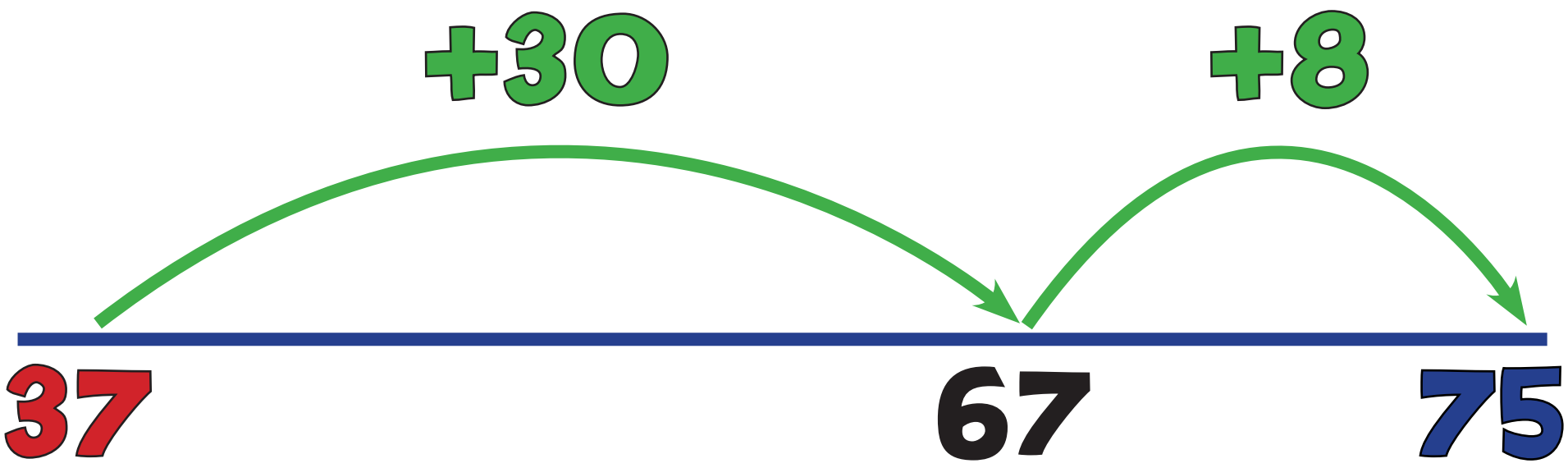
75 - 37 = 38

S8: Triple Jump!



75 - 37 = 38

S9: 10s Jump, 1s Jump!



75 - 37 = 38

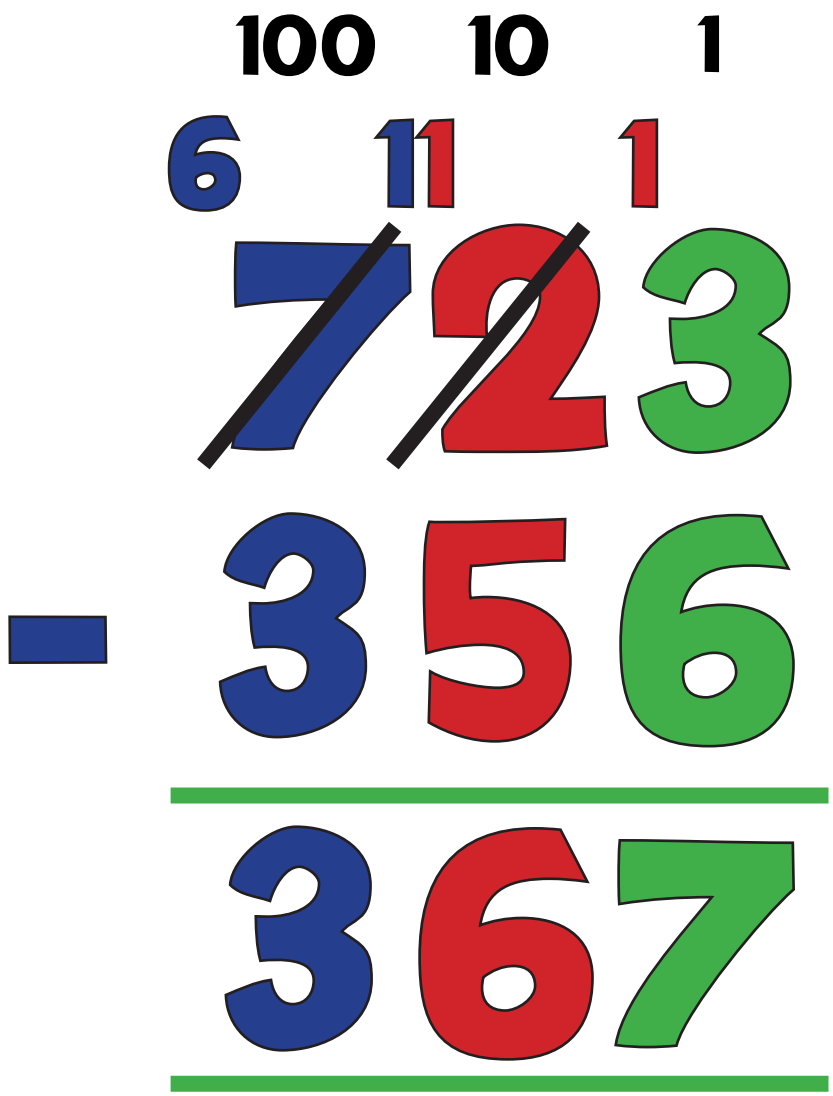
S10: Expanded Column

Subtraction (100, 10, 1s)

723 - 356 = 367

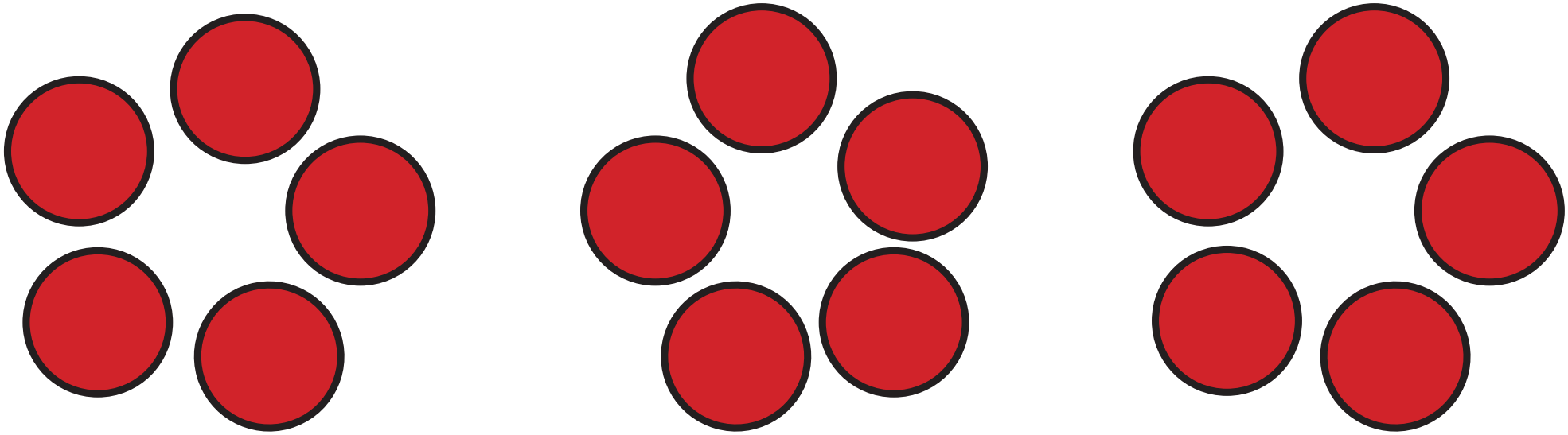
	600	110	1
	~~700~~	~~20~~	3
-	300	50	6
	300	60	7

S11: Column Subtraction



M1: Repeated Addition

(Groups)

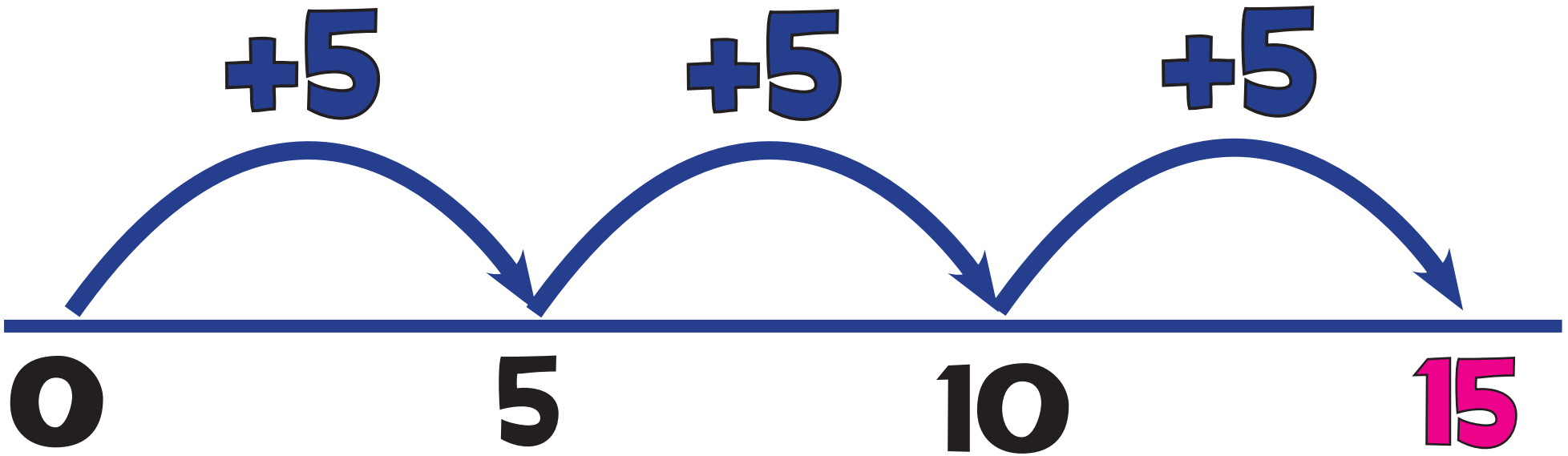


5 x 3 = 5 + 5 + 5 = 15

"5 multiplied by 3" means "5, 3 times", which gives "3 lots of 5"!

M2: Repeated Addition

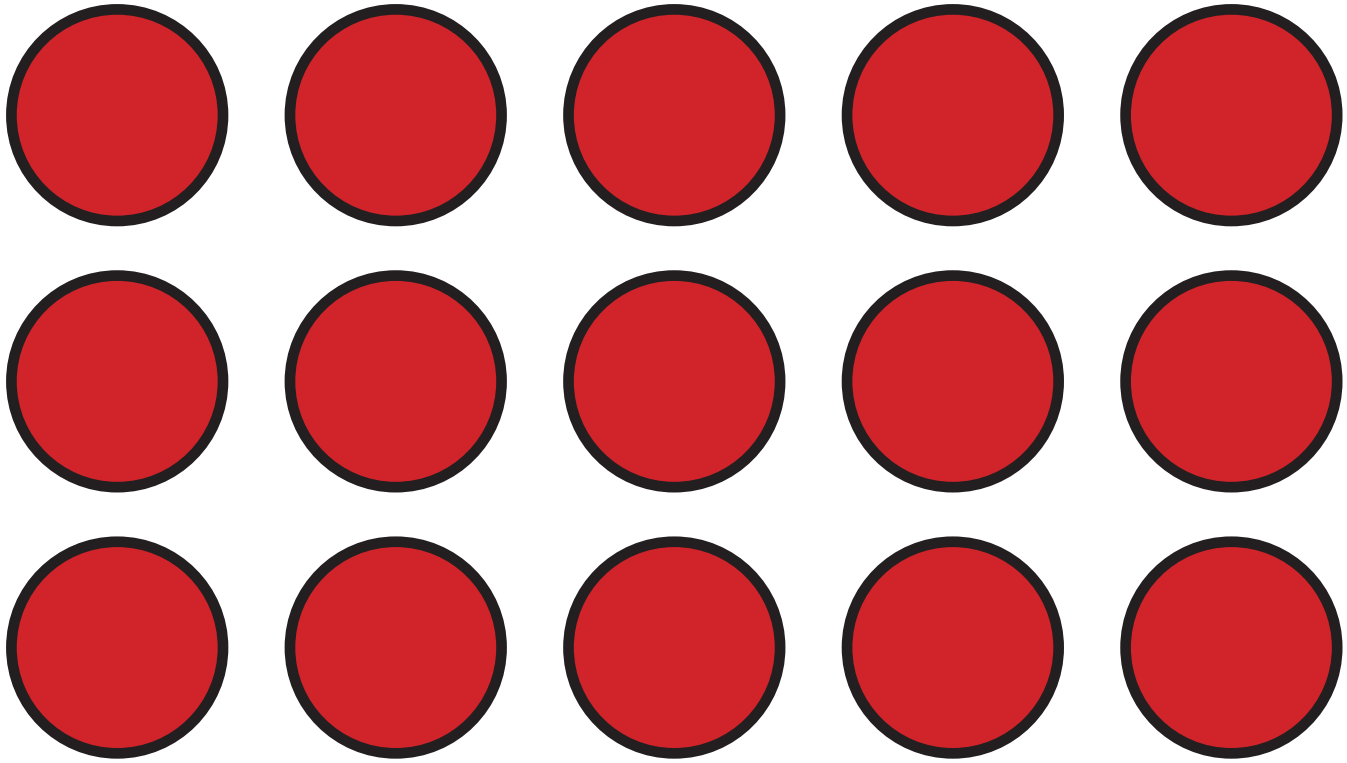
(Number Line)



5 x 3 = 5 + 5 + 5 = 15

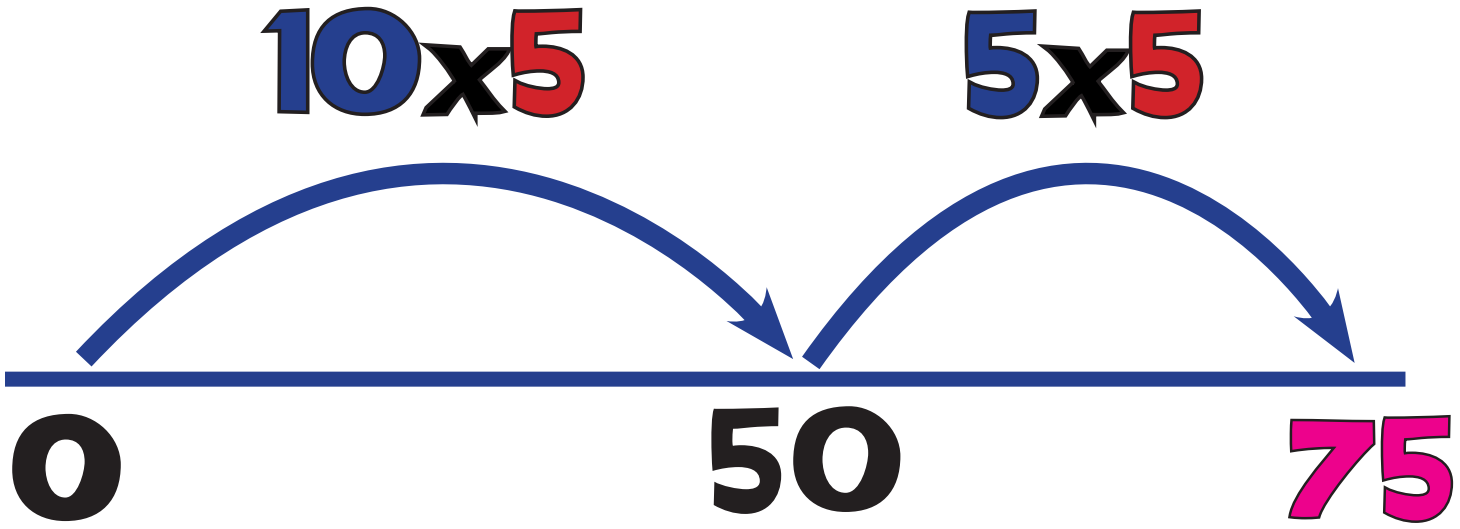
"5 times 3" means "5, 3 times!"

M3: Arrays



3 x 5 = 15 or 5 x 3 = 15

M4: Multi Boing!



10 x 5 = 50

5 x 5 = 25

75

15 x 5 = 75

M5: Grid Method

Short Multiplication

15 x 5 = 75

x	10	5
5	50	25

50 + 25 = 75

M6: Expanded Column

100	10	1	
1	4	7	
x		4	
	2	8	(4 x 7)
1	6	0	(4 x 40)
4	0	0	(4 x 100)
5	8	8	

M7: Column Multiplication

100	10	1
1	4	7
x		4
5	8	8
1	2	

M8: Grid Method

Long Multiplication

43 x 65 = 2795

x	40	3
60	2400	180
5	200	15

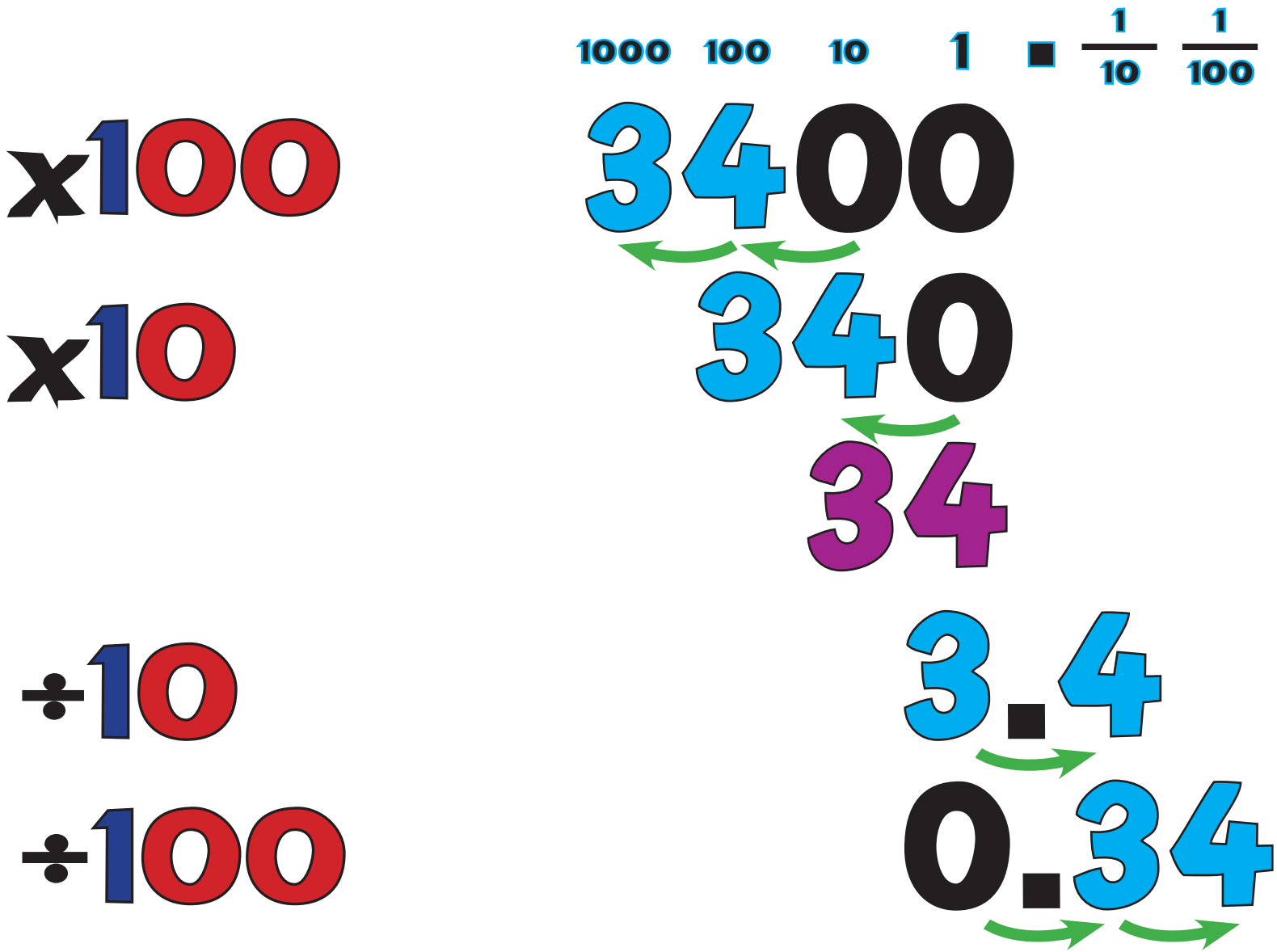
2400 + 180 + 200 + 15 = 2795

M9: Long Multiplication

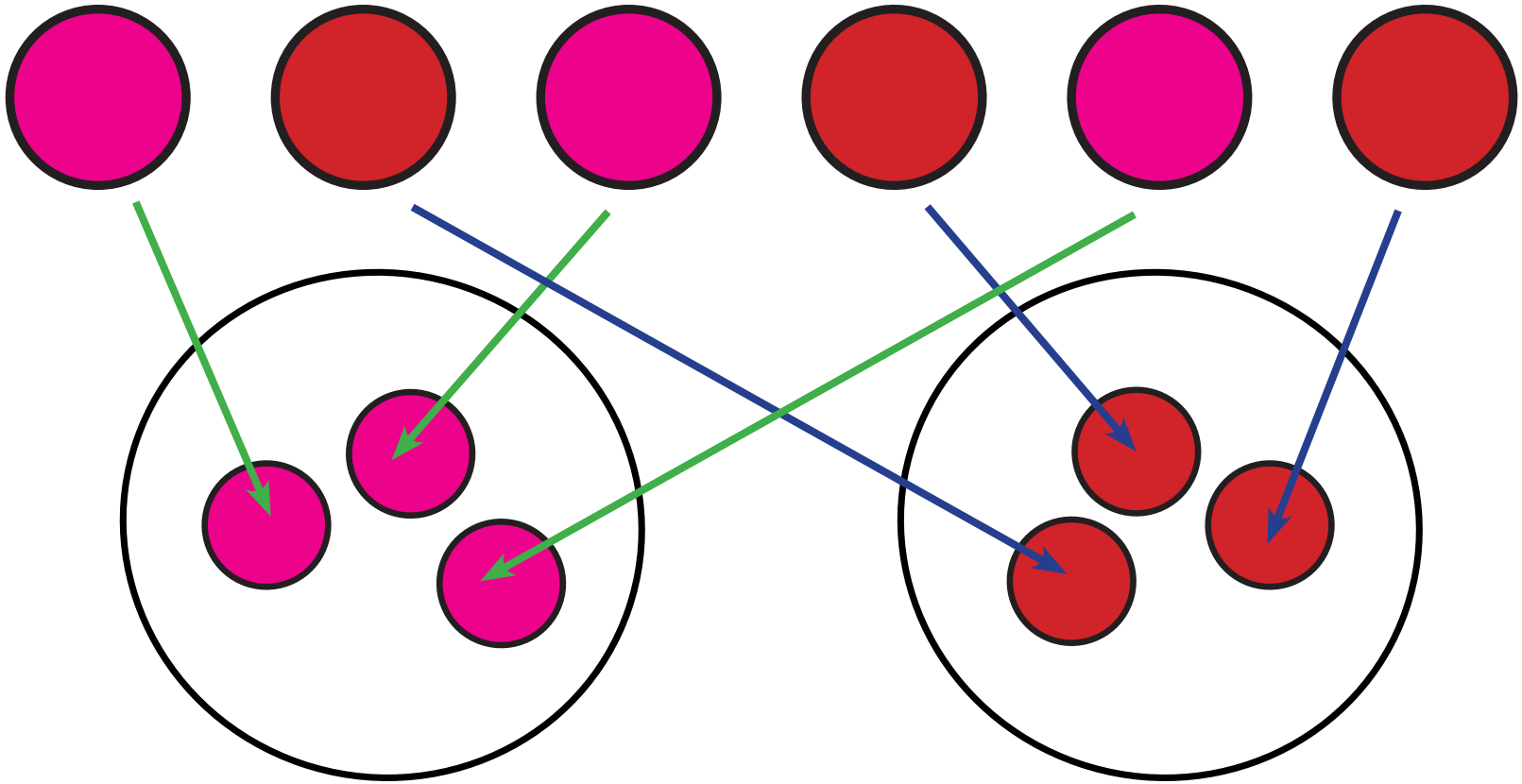
Column

$$
\begin{array}{rr}
 & 43 \\
\times & 65 \\
\hline
 & 215 \quad (5 \times 43) \\
+ & 2580 \quad (60 \times 43) \\
\hline
 & 2795
\end{array}
$$

MM1: Jump!

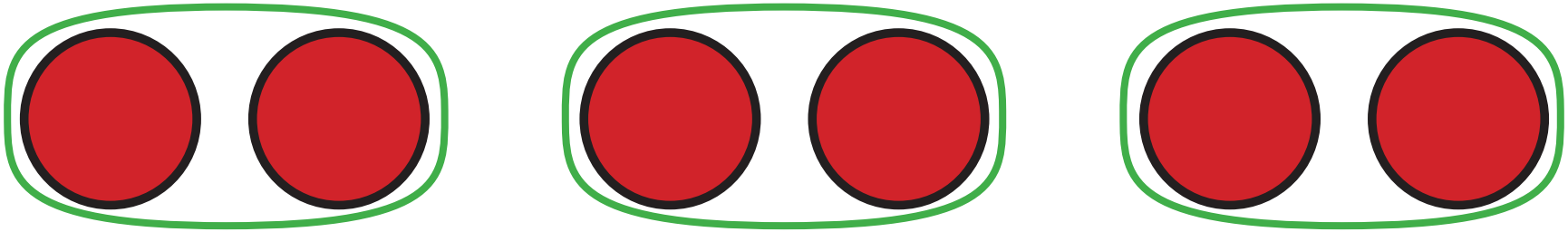


D1: Sharing (Concept)



"If I share 6 into 2 equal amounts, how many in each group?" Answer: 3

D2: Grouping (Concept)

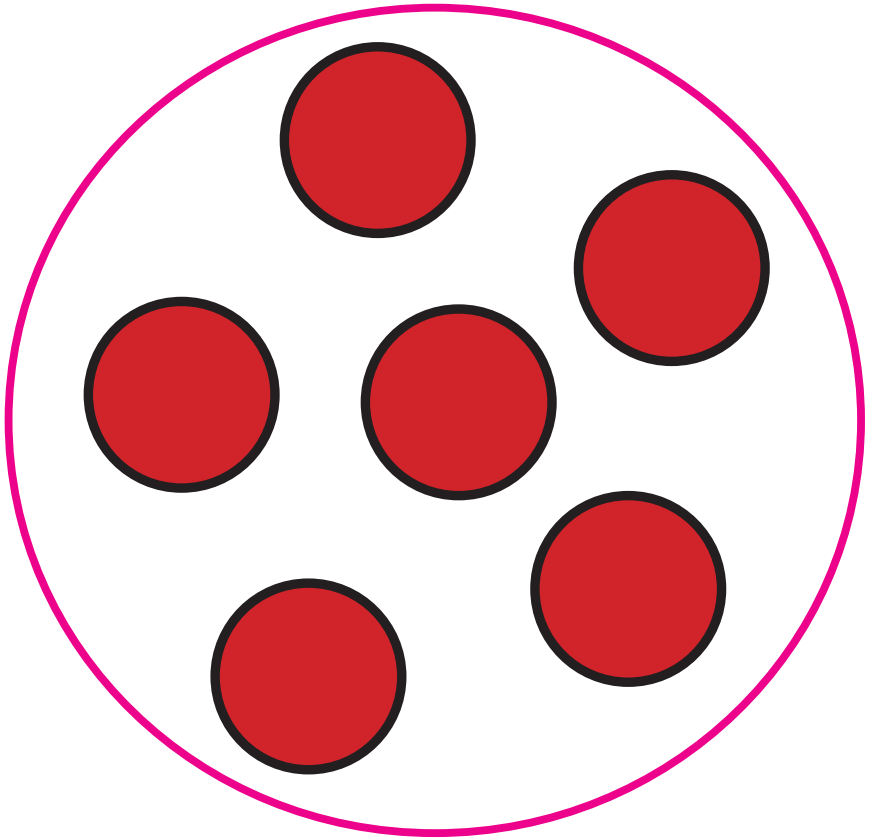


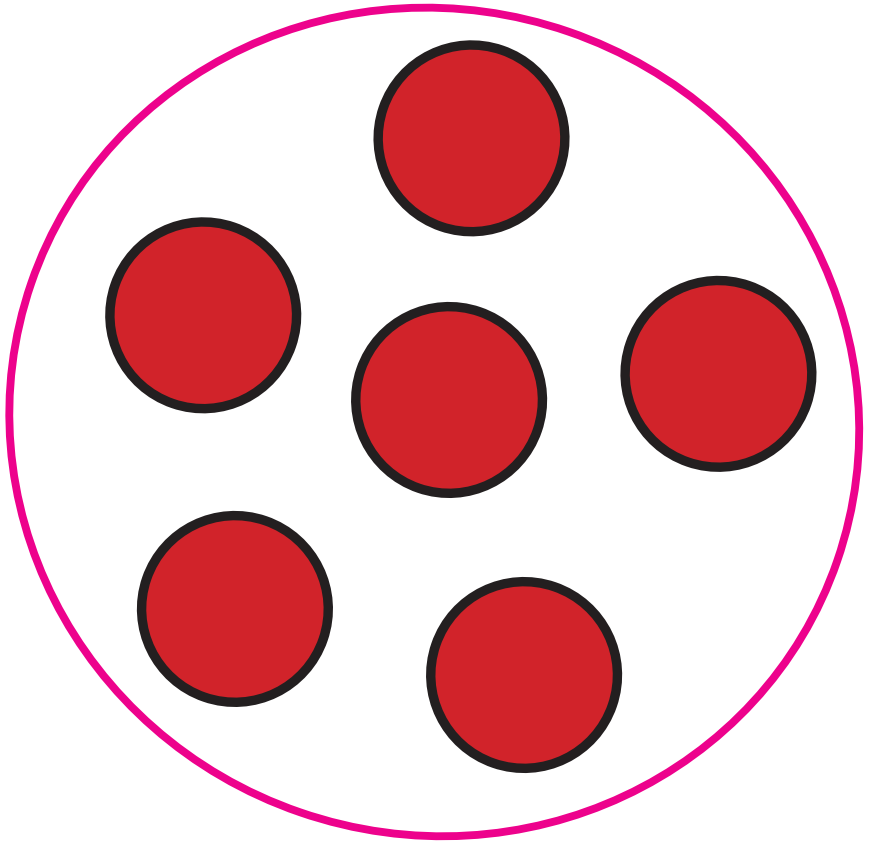
"How many groups of 2 can I make out of 6?
Answer: 3

D3: Division as Sharing

12 ÷ 2 = 6

"If I share 12 into 2 equal amounts, how many in each group?" Answer: 6

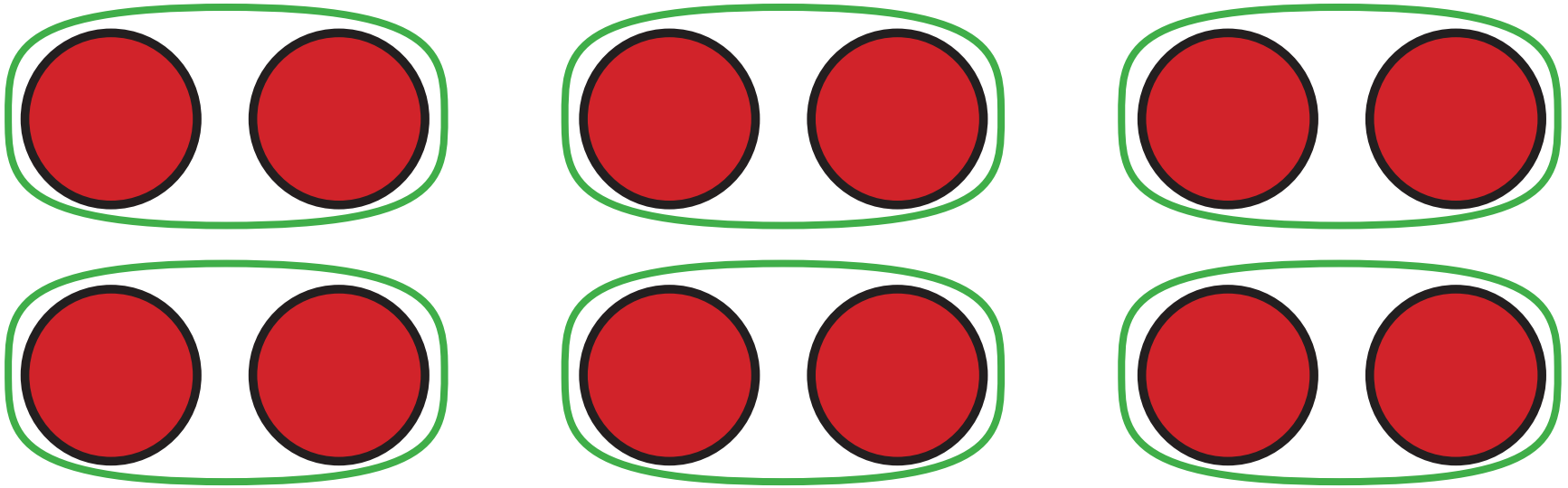




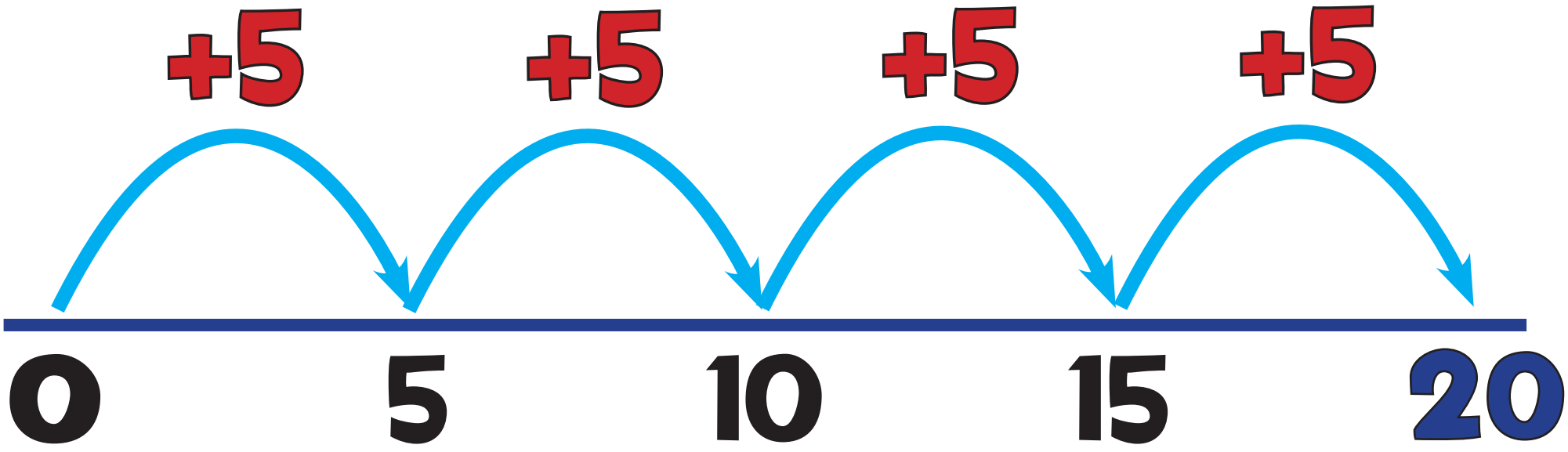
D4: Division as Grouping

12 ÷ 2 = 6

"How many groups of 2 can I fit into 12?"
Answer: 6



D5: Grouping on a Number Line



"How many 5s in 20?"
Answer: 4

$$20 \div 5 = 4$$

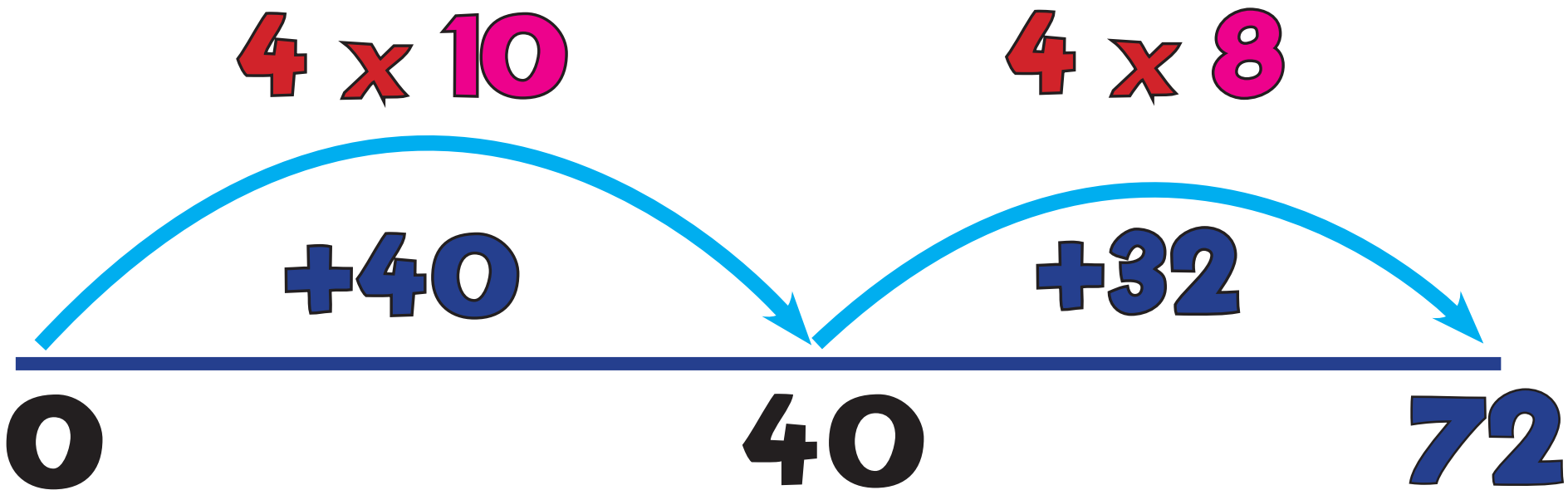
D6: Grouping Grid

4	4	4	4	4
4				3

"How many times can I fit (groups of) 4 into 27?"
Answer: 6r3

$$27 \div 4 = 6r3$$

D7: Chunking Jump



"How many 4s in 72?"
Answer: 18

$$72 \div 4 = 18$$

D8: Find the Hunk!

72 ÷ 4 = 18

The Hunk!

Chunk

40 + 32 ÷ 4

10 + 8 = 18

D9: Mega Hunk!

$$136 \div 4 = 34$$

Mega Hunk!

Chunk

$$120 + 16 \quad \div 4$$

$$30 + 4 = 34$$

D10: Short Division

$$136 \div 4 = 34$$

$$\begin{array}{r} 34 \\ 4\overline{)136} \\ \end{array}$$

D11: Chunking

$$
\begin{array}{r}
34 \\
4 \overline{)\,136} \\
-120 \quad (4 \times 30) \\
\hline
16 \\
-\ 16 \quad (4 \times 4) \\
\hline
0
\end{array}
$$

$136 \div 4 = 34$

D12: Long Division

Short Division Method

$$37 \overline{)983} = 26 \text{ r } 21$$

9 24

D13: Long Division

Chunking Method

$$
\begin{array}{r}
26 \text{ r } 21 \\
37 \overline{)\,983} \\
-\,740 \quad (37 \times 20) \\
\hline
243 \\
-\,222 \quad (37 \times 6) \\
\hline
21
\end{array}
$$

$$983 \div 37 = 26 \text{ r } 21$$

D14: Long Division

Traditional Method

$$
\begin{array}{r}
26 \text{ r } 21 \\
37 \overline{)\,983} \\
-\,74 \\
\hline
243 \\
-\,222 \\
\hline
21
\end{array}
$$

$983 \div 37 = 26 \text{ r } 21$

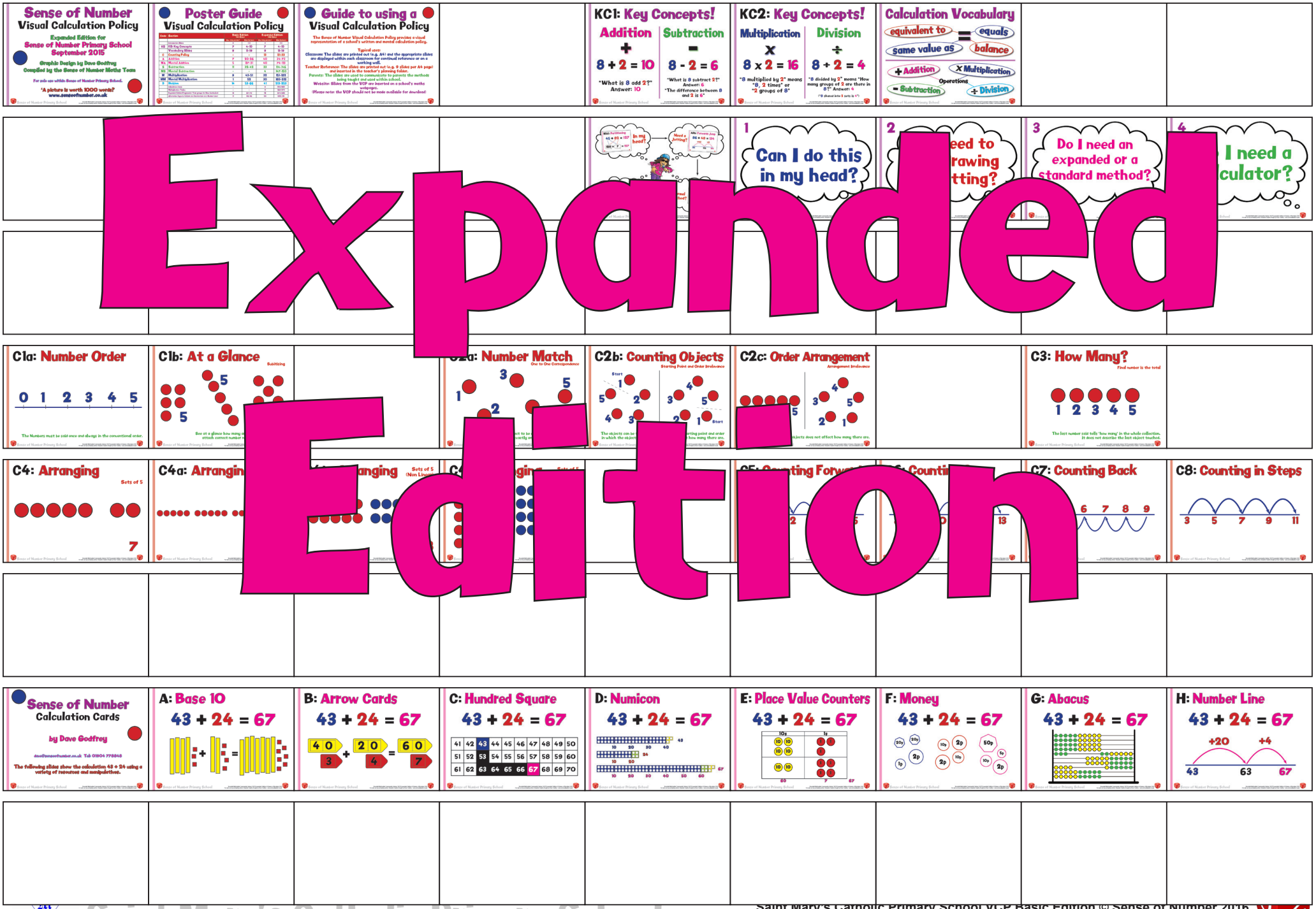
Sense of Number

Visual Calculations Policy

Expanded Edition 2014 by Dave Godfrey, Anthony Reddy and Laurence Hicks

The following pages contain a snapshot of the 235 slide, Sense of Number Expanded Edition of the VCP. It contains a Counting Policy, leveled progression of strategies found in the Basic Edition and additional Subtraction & Multiplication Mental Method slides.

This edition is also available for bespoke preparation at additional cost of £130.



Expanded Edition

Expanded Edition

Y1	A1: Objects & Pictures					A	Addition Calculation	Addition Vocabulary
Y1		A2: Counting On						
Y1								
Y2		A2b: Counting On						
Y2								
Y2			A3a: Forwards Jump	A4a: Partitioning	A5a: Partition Jot	(A6: Expanded Column)	(A7: Column Addition)	
Y2/3		A3b: Forwards Jump	A4b: Partitioning	A5b: Partition Jot	(A6: Expanded Column)	(A7: Column Addition)		
Y3		A3c: Forwards Jump	A4c: Partitioning	A5c: Partition Jot	A6: Expanded Column	A7: Column Addition		

Expanded Edition

Y4				A5d: Partition Jot 4873 + 3762 = 8635 7000 + 1500 + 130 + 5		A7d: Column Addition 4873 + 3762 8635	
Y5						A7e: Column Addition	
Y5					A5f:		
Y5		A3g: Decimal Jump 5.65 + 3.29 = 8.94 +0.09 8.94		A5g: Partition Jot 5.65 + 3.29 = 8.94		A7g: Column Addition 5.65 + 3.29 8.94	
Y5							
Y5				A5i: Par £38.25 + £27.46 = £65.71 £65.00 + £0.71		Column Addition With Money £38.25 + £27.46 £65.71	
Y5						A7j: Column Addition With Decimals 73.4 + 5.67 = 79.07 73.4 + 5.67 79.07	

Expanded Edition

Y1	S1: Objects 7 - 3 = 4					S	Subtraction Calculation 6 (minuend) - 2 (subtrahend) = 4 (difference)	Subtraction Vocabulary count back, decrease, minus, less, subtract, fewer, count on, take away, difference between
Y1	S2: What's the Difference?	S3: Counting Back 9 10 11 12 -1 -1 -1	S4: Counting On +1 +1 +1 9 10 11 12					
Y2		S4a:						
Y2		S5: Backwards Bounce 64 65 66 67 77 87 -1 -1 -1 -10	(S8: Triple Jump!) +7 +50 +7 23 30 80 87 87 - 23 = 64	(S9: 10s Jump, 1s Jump!) +60 +4 83 87 23 = 64	(S10: Expanded Column) 87 - 23 = 64 80 7 20 3 60 4	(S11: Column Subtraction) 10 1 87 - 23 64		
Y2						(S11: Column Subtraction) 10 1 6 15 75 37 38		
Y3			S8b: Qu +4 +40 +30 +2 56 60 100 130 132 132 - 56 = 76	Jump, +70 +6 56 126 132 132 - 56 = 76	10: Expa 132 - 56 = 38 0 100 120 30 1 2 - 50 6 70 6	umn Subtraction) 100 10 1 0 12 1 132 - 56 76		
Y3			S8c: Big Jump! +44 +323 +4 +40 +300 +23 356 360 400 700 723 723 - 356 = 367	S9c: 100s, 10s, 1s Jump +300 +60 +7 356 656 716 723 723 - 356 = 367	S10: Expanded Column 723 - 356 = 367 600 110 1 700 20 3 - 300 50 6 300 60 7	S11: Column Subtraction 100 10 1 6 11 1 723 - 356 367		
Y4			S8d: Quad Jump Extreme +24 +200 +3000 +42 1776 1800 2000 5000 5042 5042 - 1776 = 3266	S9d: 1000s, 100s, 10s, 1s Jump +3000 +200 +60 +6 1776 4776 4976 5036 5042 5042 - 1776 = 3266		S11d: Column Subtraction 4 9 13 1 5042 - 1776 3266		

Expanded Edition

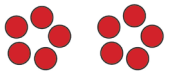
Y5							S11e: Column Subtraction 742831 - 427358 = 315473
Y5				S8f: Decimal T-J! +0.3 +4 +0.4 8.7 9 13 13.4	S9f: Is Jump, Tenths Jump! +4 +0.7 8.7 12.7 13.4		S11f: Column Subtraction 13.4 - 8.7 = 4.7
Y5							ction 72 47 24.58
Y5							S11h: Column Subtraction With Decimals 12.4 - 5.97 = 6.43
MS	MS1: Counting 46 - 21 = 25 -20 -1 46 26 25		MS1: nting 75 - 47 = 28 +20 +8 47 67 75	MS1: d & 84 - 29 = 55 84 - 30 + 1 54 + 1 = 55			
		MS2a: Counting On 75 - 47 = 28 +3 +25 47 50 75					

Expanded Edition

M

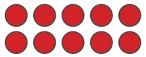
Y1

(M1: Groups)



*2 groups of 5 counters makes 10 counters altogether"

(M3: Arrays)



"2 groups of 5 counters" or "5 groups of 2 counters" - "10 counters altogether"

Multiplication Calculation

4 x 2 = 8

(multiplied by) (equals)

multiplicand x multiplier = product

Multiplication Vocabulary

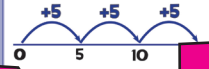
groups of, times, product, multiple, double, x, lots of, multiply, repeated addition

Y2

Addition (Groups)

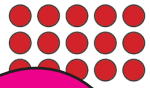
+ 5 + 5 =

M2: Repeated Addition (Number Line)



x 3 = 5

M3: Arrays



x 3 =

Y2

F: 2x Table Facts

2 x 1 = 2

2 x 6 = 12

2 x 7 = 14

2 x 8 = 16

2 x 9 =

2 x 10 =

2 x 12 = 24

Table Facts

5 x 7 =

5 x 8 =

5 x 9 =

5 x 10 =

5 x 11 = 5

5 x 6 = 30

5 x 12 =

F: 10x

x 1 = 10

x 6 = 60

9 =

10 x 10 = 1

10 x 11 = 110

10 x 12 = 120

Y3

MF: 3x Table Facts

3 x 1 = 3

3 x 2 = 6

3 x 3 = 9

3 x 4 = 12

3 x 5 = 15

3 x 6 = 18

3 x 7 = 21

3 x 8 = 24

3 x 9 = 27

MF: 4x Table Facts

4 x 1 = 4

4 x 2 = 8

4 x 7 = 28

4 x 8 = 32

x 9 = 36

x 10 = 40

x 11 = 44

x 12 = 48

MF: 8x Table Facts

8 x 1 = 8

8 x 2 = 16

8 x 3 = 24

8 x 4 = 32

8 x 7 = 56

8 x 8 = 64

8 x 9 = 72

Y3

ti Boing!

5 x 5 = 75

M4: Grid Method (Short Multiplication)

10 0

5 5

50 + 5

M5: Grid Method (Short Multiplication)

75

10

5

+

M6: Expanded Column

(M7: Column Multiplication)

15

x 5

75

2

Y4

MF: 6x Table

6 x 1 = 6

6 x 2 = 12

6 x 3 = 18

6 x 4 = 24

6 x 5 = 30

6 x 6 = 36

6 x 7 = 42

6 x 8 = 48

6 x 9 = 54

6 x 10 = 60

6 x 11 = 66

6 x 12 = 72

ble Fac

7 x 1 = 7

7 x 2 = 14

7 x 3 = 21

7 x 4 = 28

7 x 5 = 35

7 x 6 = 42

7 x 7 = 49

7 x 8 = 56

7 x 9 = 63

7 x 10 = 70

7 x 11 = 77

7 x 12 = 84

ble

9 x 1 = 9

9 x 2 = 18

9 x 3 = 27

9 x 4 = 36

9 x 5 = 45

9 x 6 = 54

9 x 7 = 63

9 x 8 = 72

9 x 9 = 81

9 x 10 = 90

9 x 11 = 99

9 x 12 = 108

d Meth (Short Multiplication)

43 x 6 = 258

x	40	3
6	240	18

240 + 18 = 258

M6: Expanded Column

43

x 6

18 (6 x 3)

240 (6 x 40)

258

mn Multiplication)

43

x 6

258

1

Y4

MF: 11x Table Facts

11 x 1 = 11

11 x 2 = 22

11 x 3 = 33

11 x 4 = 44

11 x 5 = 55

11 x 6 = 66

11 x 7 = 77

11 x 8 = 88

11 x 9 = 99

11 x 10 = 110

11 x 11 = 121

11 x 12 = 132

MF: 12x Table Facts

12 x 1 = 12

12 x 2 = 24

12 x 3 = 36

12 x 4 = 48

12 x 5 = 60

12 x 6 = 72

12 x 7 = 84

12 x 8 = 96

12 x 9 = 108

12 x 10 = 120

12 x 11 = 132

12 x 12 = 144

M5b: Grid Method (Short Multiplication)

147 x 4 = 588

x	100	40	7
4	400	160	28

400 + 160 + 28 = 588

M6: Expanded Column

147

x 4

28 (4 x 7)

160 (4 x 40)

400 (4 x 100)

588

M7: Column Multiplication

147

x 4

588

1 2

M7c: Column Multiplication

3647

x 4

14588

2 1 2

Y5

M8: Grid Method (Long Multiplication)

43 x 65 = 2795

x	40	3
60	2400	180
5	200	15

2400 + 180 + 200 + 15 = 2795

M9: Long Multiplication (Column)

43

x 65

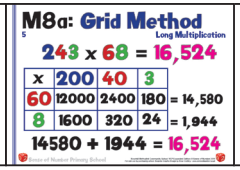
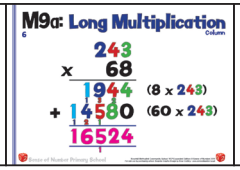
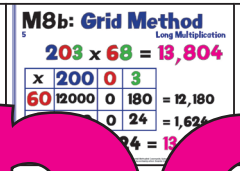
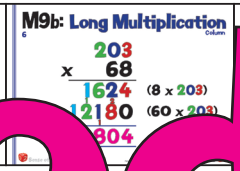
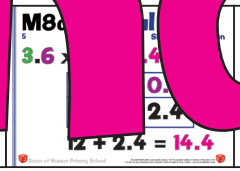
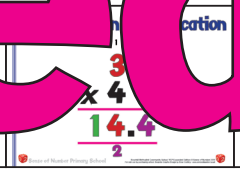
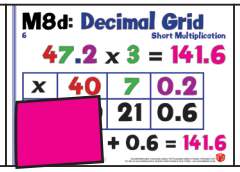
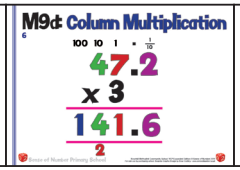
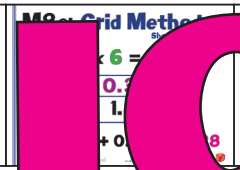
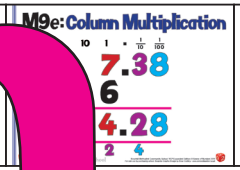
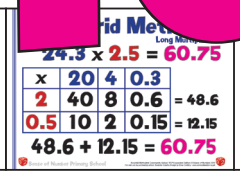
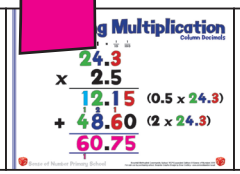
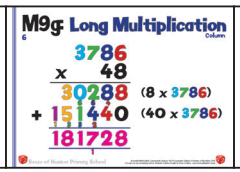
215 (5 x 43)

+ 2580 (60 x 43)

1 1

2795

Expanded Edition

Y5							
Y5							
Y5							
Y6							
Y6							
Y6							
Y6							

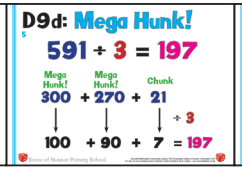
D

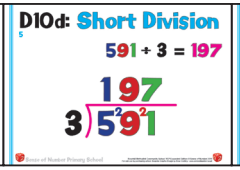
Expanded Edition

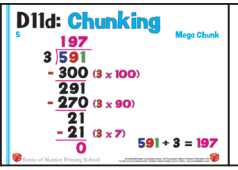
Y1	D1: Sharing (Concept)	D2: Grouping (Concept)					Division Calculation	Division Vocabulary
Y2	D3: Sharing	D4: Division as Grouping	D5: Grouping on a Number Line					
Y2								
Y3		D6: Grouping Grid						
Y3		D7: Chunking	D8: Finding the Hunk!	D10: Short Division	D11: Chunking			
Y3			D8a: Finding the Hunk!					
Y4			D9: Mega Hunk!	D10: Short Division	D11: Chunking	D11b: Chunking		
Y5			D9c: Mega Hunk!	D10c: Short Division	D11c: Chunking			

Expanded Edition

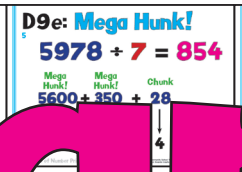
Y5

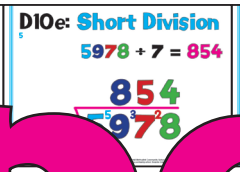


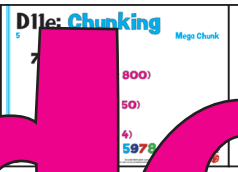




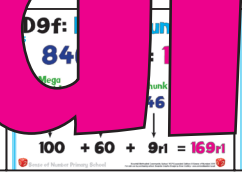
Y5

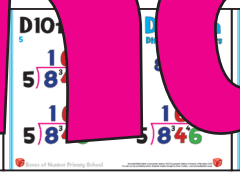


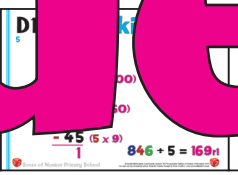




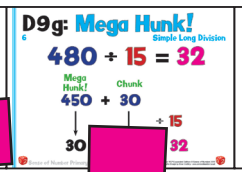
Y5



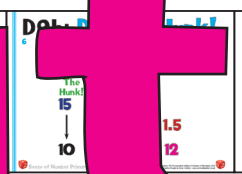




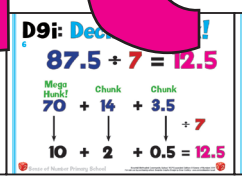
Y6

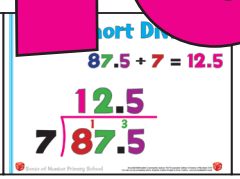


Y6

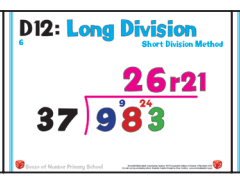


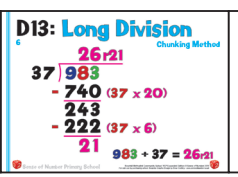
Y6

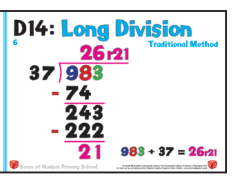




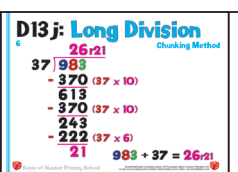
Y6







Y6



MA

	MA1: Partitioning	MA2: Counting On	MA2a: Counting On	MA2b: Counting On	MA3: Number Bonds	MA4: Double & Adjust	MA5: Round & Adjust
	45 + 82 = 127 120 + 7 = 127	45 + 20 = 65 +20 45 65			45 + 95 = 140 40 + 100 = 140	45 + 46 = 91 45 + 45 + 1 90 + 1 = 91	45 + 39 = 84 45 + 40 - 1 85 - 1 = 84
Y1			12 + 5 = 17 +5 12	57 + 10 = 67 +10 67		5 + 6 = 11 5 + 5 + 1 1 = 11	= 54 - 1 = 1 =
Y2	A1: Partitioning = 64	Counting 7 = 85 85		A2b: 58 + 98	MA3: 3 +	MA4 1 = 15	M - 1 65 - 1 = 64
Y3	MA1: Partitioning 57 + 25 = 82 70 + 12	MA2a: Counting 85 + 50 = 135		MA2b: Counting On 534 + 300 = 834 +300	MA3: Number Bonds 43 + 9 + 7 + 21 = 80 50 30	MA4: Double & Adjust 16 + 17 = 33 + 1 = 33	MA5: Round & Adjust 45 + 97 = 142 45 + 100 - 3 145 - 3 = 142
Y4	MA1: Partitio 648 + 231 800 + 70 +	ounting On 60 = +60 784			MA3: 70	MA4: Double & Adj + 38 +	MA5: Roun 2 43
Y5	MA1: Partitio 576 + 258 = 834 700 + 120 + 14 = 834	unting 837 + 500 = 1337 +500 837 1337		7583 + 5000 = 12583 +5000 7583 12583	MA3: Nu ds £4.56 + £3.27 + £1.44 = £9.27 £6.00 £3.27	uble & 125 + 127 = 252 125 + 125 + 2 250 + 2 = 252	45: Roun ust 4645 + 1996 = 6641 4645 + 2000 - 4 6645 - 4 = 6641
Y6	MA1: Partitioning 4.73 + 2.21 = 6.94 6 + 0.9 + 0.04 = 6.94	MA2a: Counting On 43,826 + 30,000 = 73,826 +30,000 43,826 73,826		MA2b: Counting On 5,763,947 + 4,000,000 = 9,763,947 +4,000,000 5,763,947 9,763,947	MA3: Number Bonds 24.25 + 31.63 + 21.75 = 77.63 46 31.63	MA4: Double & Adjust 4.5 + 4.7 = 9.2 4.5 + 4.5 + 0.2 9 + 0.2 = 9.2	MA5: Round & Adjust 45.2 + 49.9 = 95.1 45.2 + 50 - 0.1 95.2 - 0.1 = 95.1

Expanded Edition

MM

MM1: Jump!

x100 3400
x10 340
34
+10 3.4
+100 0.34

MM2: Re-ordering

(9 x 2) x 5
18 x 5 = 90
(9 x 5) x 2
45 x 2 = 90
(2 x 5) x 9
10 x 9 = 90 *

MM3: Partitioning

15 x 5 = 75

50 + 25 = 75
(10 x 5) (5 x 5)

MM4: Round & Adjust

49 x 3 = 147
(50 x 3) - (1 x 3)
150 - 3 = 147

MM5: Doubling

Double 17 = 34
20 + 14 = 34

MM2a: Re-ordering

(7 x 4) x 5
28 x 5 = 140
(7 x 5) x 4
35 x 4 = 140
(4 x 5) x
20 x = 140

MM3a: Partitioning

37 x 4 = 148

28 = 148

MM4a: Round & Adjust

198 x 4 = 792
(200 x 4) - (2 x 4)

MM5a: Doubling

Double 37 = 74
+ 14 = 74

MM4c: Round & Adjust

£5.99 x 6 = £35.94
(£6 x 6) - (1p x 6)
£36 35.94

MM5c: Doubling

Double 340 = 680
+ 80 = 680

MM5f: Doubling

Double 278 = 556
400 + 140 + 16 = 556

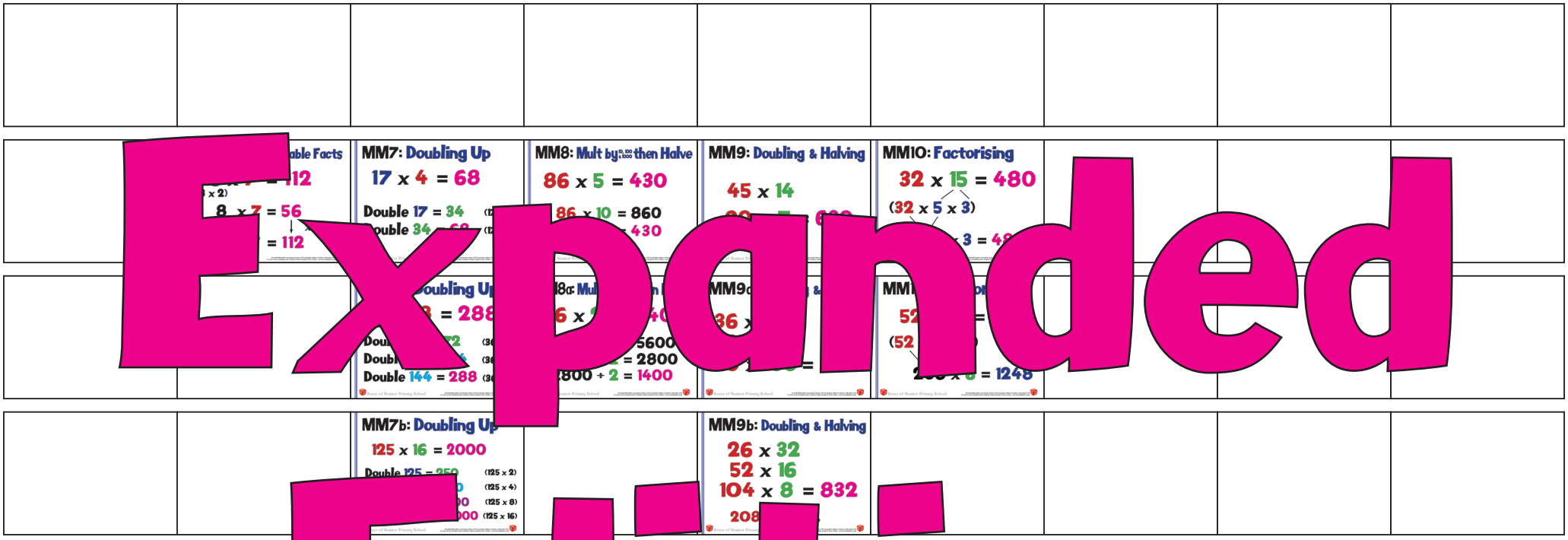
MM5f: Doubling

Double 768 = 1536
1400 + 120 + 16 = 1536

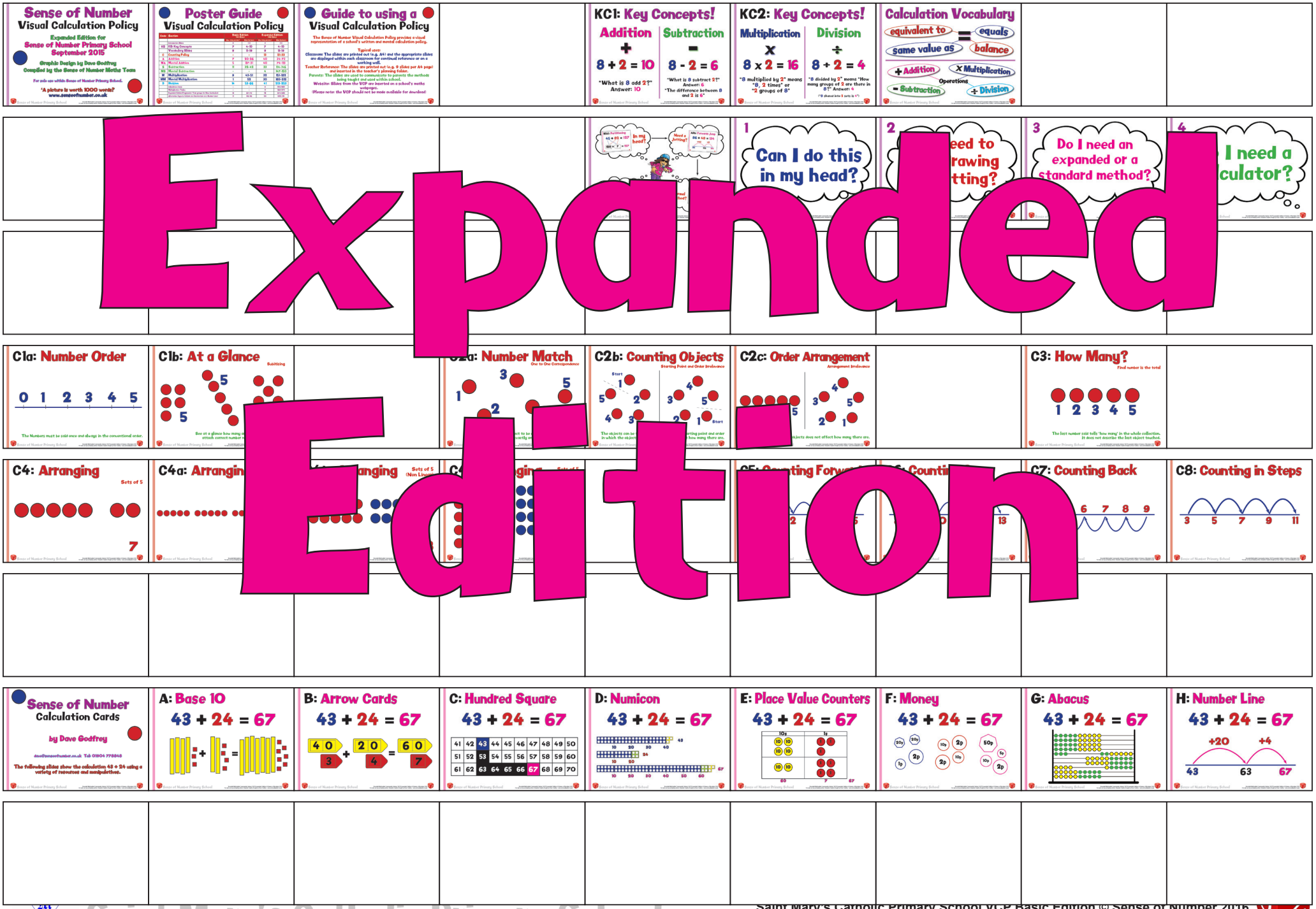
MM5g: Doubling

Double 3.7 = 7.4
6 + 1.4 = 7.4

Expanded Edition



Expanded Edition



Expanded Edition

Sense of Number

Standard Alternative Slides

by Dave Godfrey

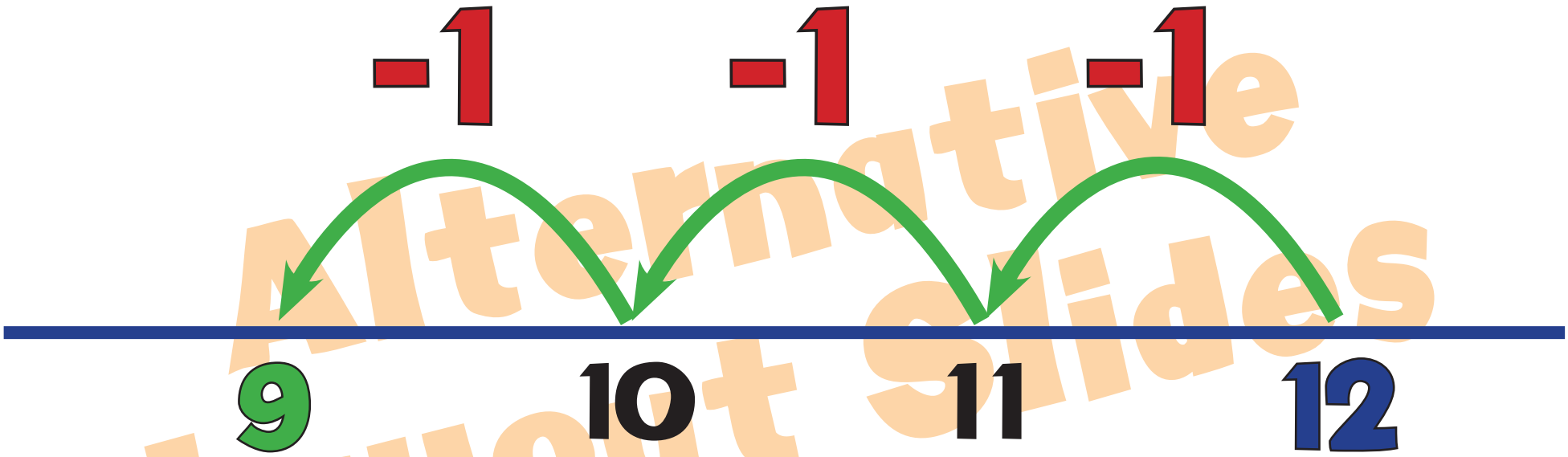
dave@senseofnumber.co.uk Tel: 01904 778848

The following slides the standard alternative slide configurations to the main set of slides.

A7: Column Addition

100	10	1
6	8	7
+ 2	4	8
1	1	
9	3	5

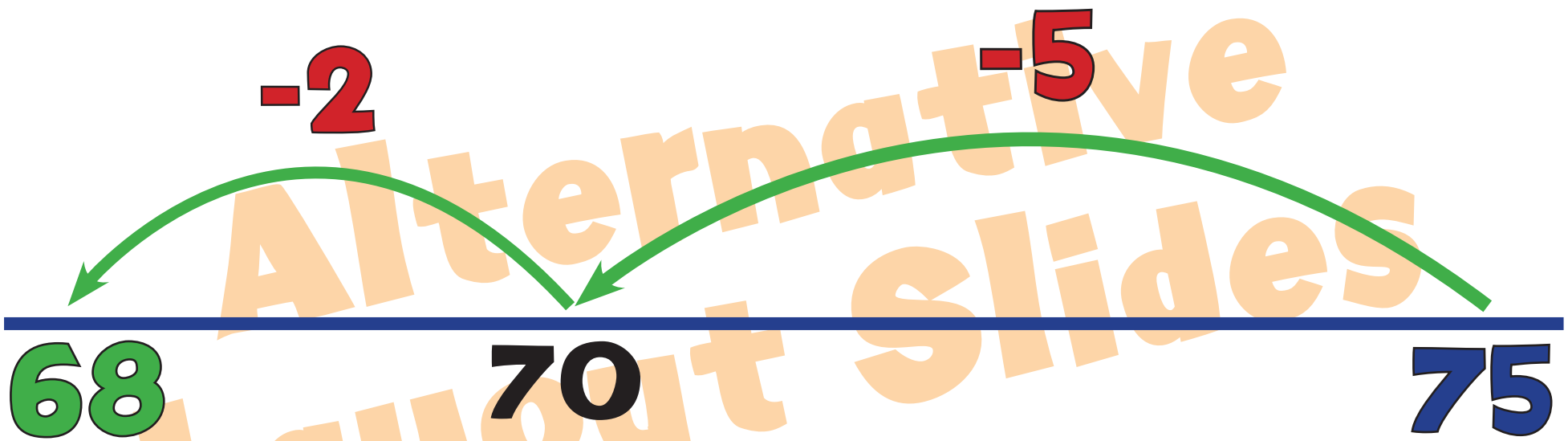
S3: Counting Back



12 - 3 = 9

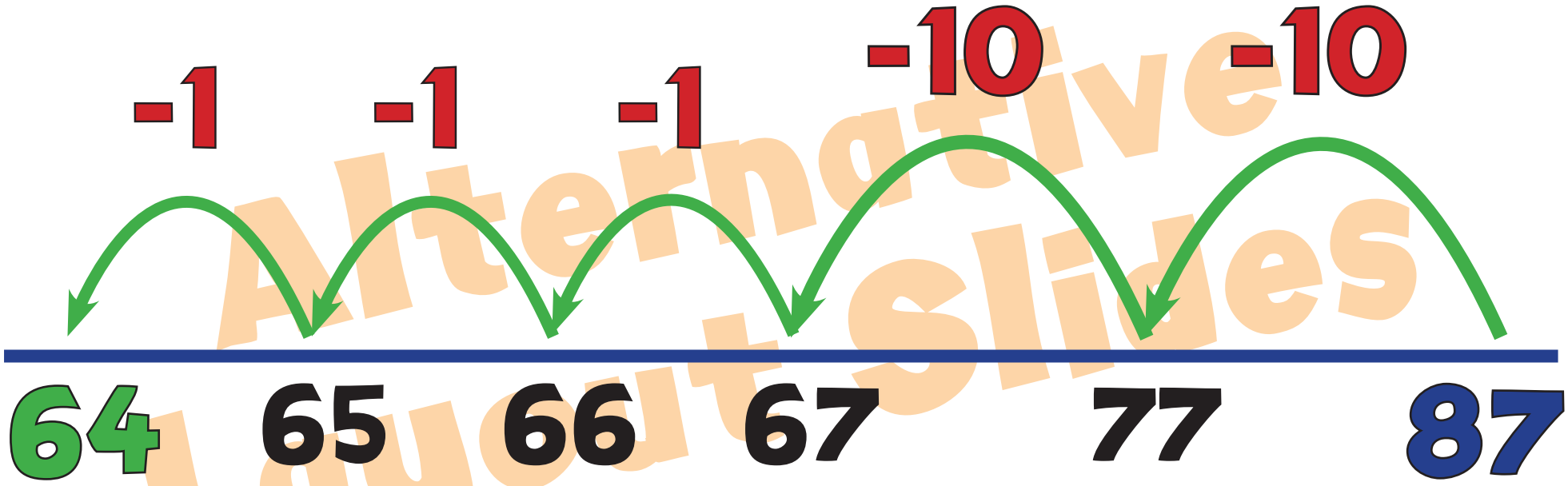
"What do I get if I take 3 away from 12? Answer: 9"

S5: Backwards Boing



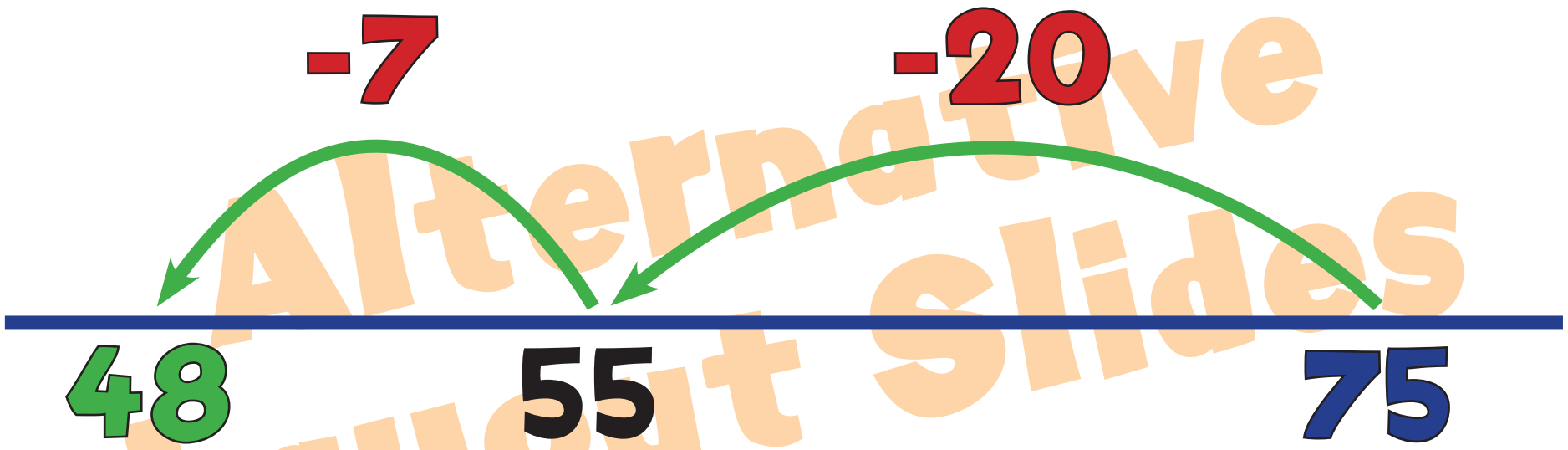
$$75 - 7 = 68$$

S6: Backwards Bounce



87 - 23 = 64

S7: Backwards Jump



75 - 27 = 48

M7: Column Multiplication

100	10	1
1	4	7
×		4
1	2	
5	8	8

M9: Long Multiplication

Column

$$
\begin{array}{r}
43 \\
\times\ 65 \\
\hline
^{2}\,^{1}215 \quad (5 \times 43) \\
+\ ^{2}\,^{1}2580 \quad (60 \times 43) \\
\hline
2795 \\
\hline
\end{array}
$$