

Year 1 - 6

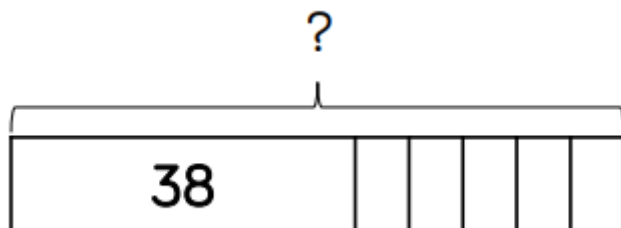
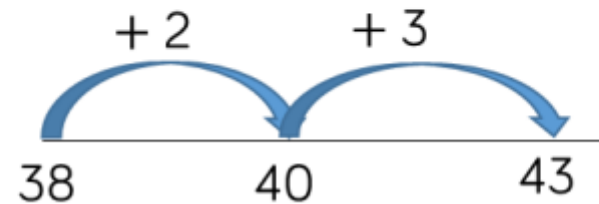
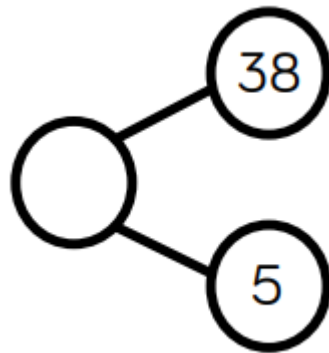
Calculation Policy

Addition and Subtraction

#MathsEveryoneCan

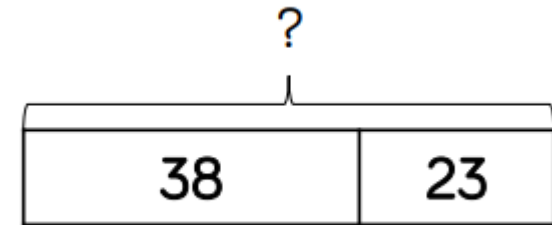
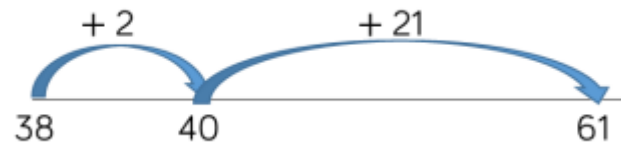
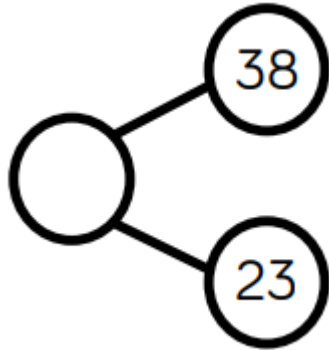


Skill	Year	Representations and models
Add two 2-digit numbers	2	Part-whole model Bar model Number lines (blank) Straws Base 10 Place value counters
Add with up to 3-digits	3	Part-whole model Bar model Base 10 Place value counters Column addition
Add with up to 4-digits	4	Part-whole model Bar model Base 10 Place value counters Column addition
Add with more than 4 digits	5	Part-whole model Bar model Place value counters Column addition
Add with up to 3 decimal places	5	Part-whole model Bar model Place value counters Column addition



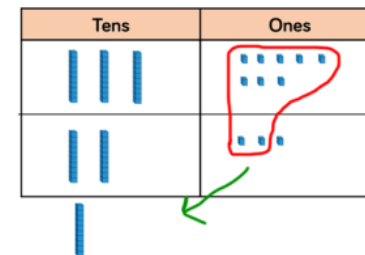
$$38 + 5 = 43$$

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



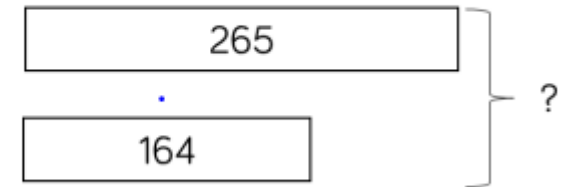
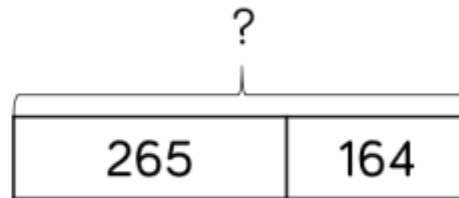
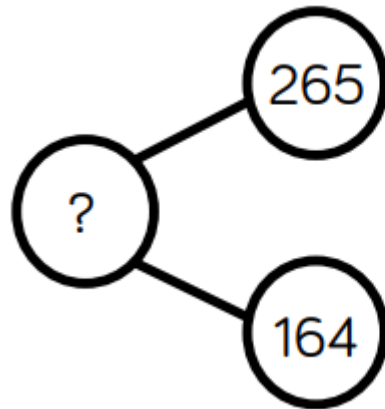
$$38 + 23 = 61$$

$$\begin{array}{r} 38 \\ + 23 \\ \hline 61 \\ 1 \end{array}$$

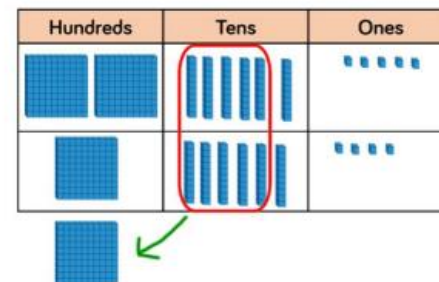


Skill: Add numbers with up to 3 digits

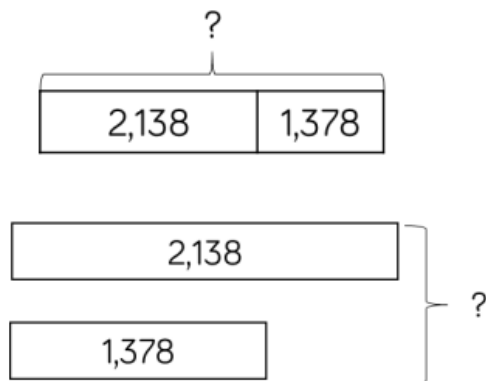
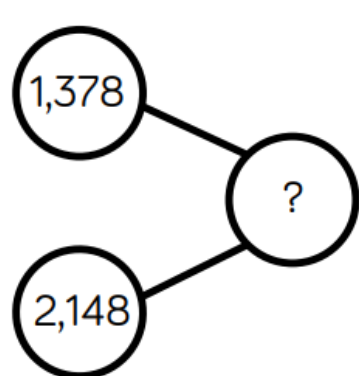
Year: 3




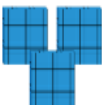








$$265 + 164 = 429$$



$$\begin{array}{r} 265 \\ + 164 \\ \hline 429 \\ 1 \end{array}$$



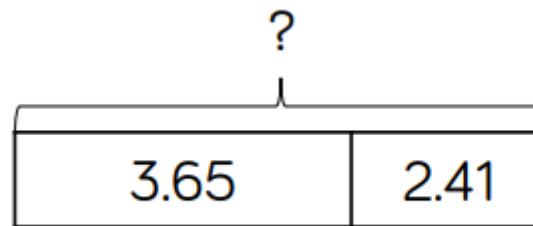
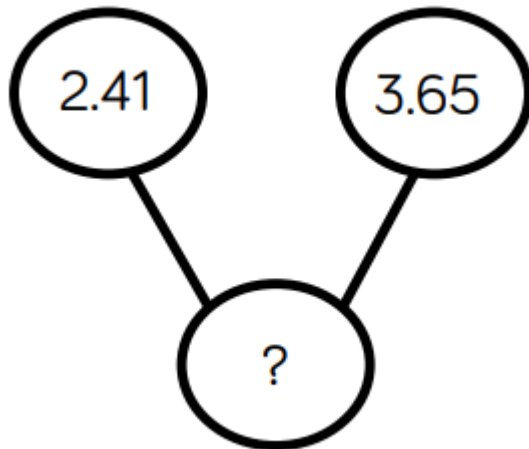
	1	3	7	8
+	2	1	4	8
	3	5	2	6
	1	1		

Thousands	Hundreds	Tens	Ones
			
			
			

$$1,378 + 2,148 = 3,526$$

Skill: Add with up to 3 decimal places

Year: 5



$$\begin{array}{r} 3.65 \\ + 2.41 \\ \hline 6.06 \\ 1 \end{array}$$

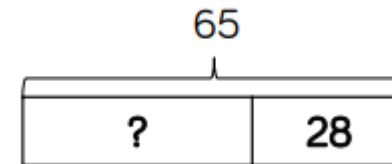
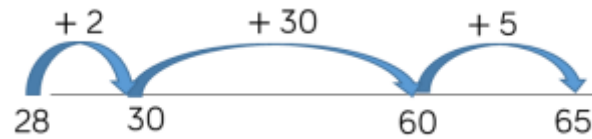
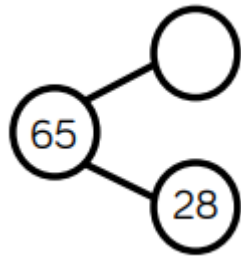
Ones	Tenths	Hundredths
1 1 1	0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01
1 1	0.1 0.1 0.1 0.1	0.01

1

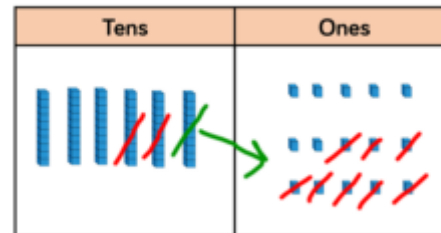
$$3.65 + 2.41 = 6.06$$

Subtraction

Skill	Year	Representations and models	
Subtract with up to 3-digits	3	Part-whole model Bar model	Base 10 Place value counters Column subtraction
Subtract with up to 4-digits	4	Part-whole model Bar model	Base 10 Place value counters Column subtraction
Subtract with more than 4 digits	5	Part-whole model Bar model	Place value counters Column subtraction
Subtract with up to 3 decimal places	5	Part-whole model Bar model	Place value counters Column subtraction



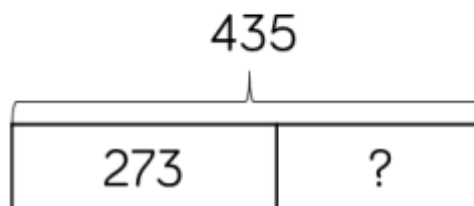
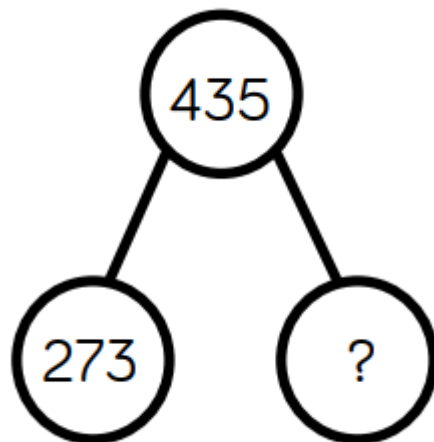
$$65 - 28 = 37$$



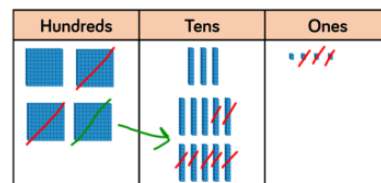
$$\begin{array}{r} 5 1 \\ 65 \\ - 28 \\ \hline 37 \end{array}$$

Skill: Subtract numbers with up to 3 digits

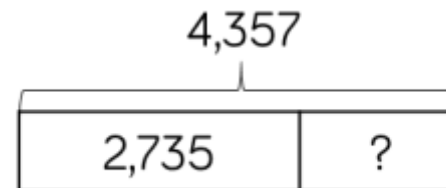
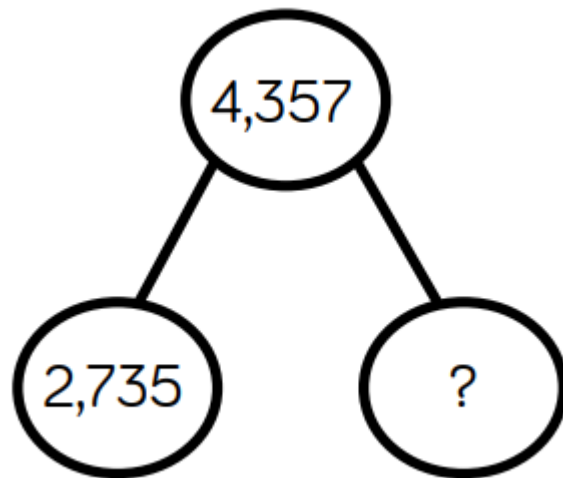
Year: 3



$$435 - 273 = 162$$



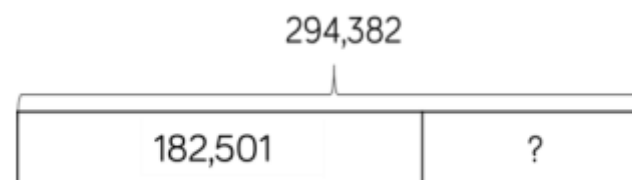
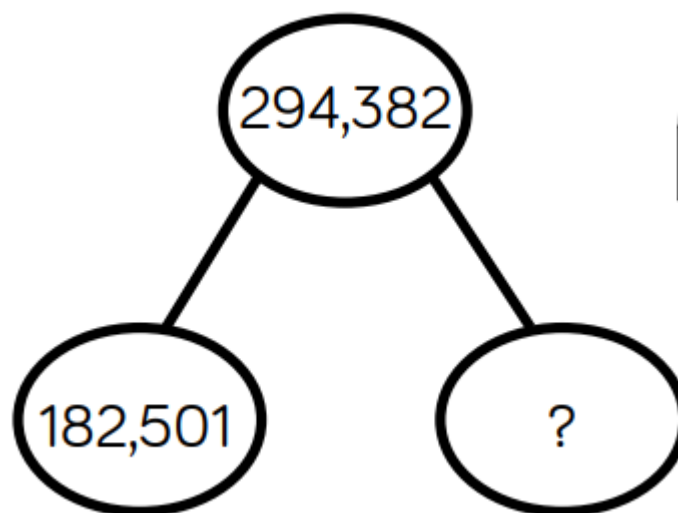
$$\begin{array}{r} 3 1 \\ 435 \\ - 273 \\ \hline 162 \end{array}$$



$$\begin{array}{r} \overset{3}{\cancel{4}}\overset{1}{3}57 \\ - 2735 \\ \hline 1622 \end{array}$$

Thousands	Hundreds	Tens	Ones

$$4,357 - 2,735 = 1,622$$



	2	9	3	¹ 3	8	2
-	1	8	2	5	0	1
	1	1	1	8	8	1

$$294,382 - 182,501 = 111,881$$

5.43	
2.7	?

$$\begin{array}{r} \overset{4}{\cancel{5}}.\overset{1}{4}3 \\ - 2.7 \\ \hline 2.73 \end{array}$$

$$5.43 - 2.7 = 2.73$$

Year 1 - 6

Calculation Policy

Multiplication and Division

#MathsEveryoneCan



Multiplication

Skill	Year	Representations and models	
Multiply 2-digit by 1-digit numbers	3/4	Place value counters Base 10	Expanded written method Short written method
Multiply 3-digit by 1-digit numbers	4	Place value counters Base 10	Short written method
Multiply 4-digit by 1-digit numbers	5	Place value counters	Short written method
Multiply 2-digit by 2-digit numbers	5	Place value counters Base 10	Short written method Grid method
Multiply 2-digit by 3-digit numbers	5	Place value counters	Short written method Grid method
Multiply 2-digit by 4-digit numbers	5/6	Formal written method	

	H	T	O		
		3	4		
×			5		
		2	0	(5 × 4)	
+	1	5	0	(5 × 30)	
	1	7	0		

	H	T	O	
		3	4	
×			5	
	1	7	0	
	1	2		

$$34 \times 5 = 170$$

Skill: Multiply 3-digit numbers by 1-digit numbers

Year: 4

	H	T	O
	2	4	5
×			4
<hr/>			
	9	8	0
	1	2	

$$245 \times 4 = 980$$

Skill: Multiply 4-digit numbers by 1-digit numbers

Year: 5

	Th	H	T	O
	1	8	2	6
×				3
<hr/>				
	5	4	7	8
	2		1	

$$1,826 \times 3 = 5,478$$

Skill: Multiply 2-digit numbers by 2-digit numbers

Year: 5

	H	T	O
		2	2
×		3	1
		2	2
	6	6	0
	6	8	2

$$22 \times 31 = 682$$

Skill: Multiply 3-digit numbers by 2-digit numbers

Year: 5

Th	H	T	O
	2	3	4
×		3	2
	4	6	8
17	10	2	0
7	4	8	8

$$234 \times 32 = 7,488$$



Skill: Multiply 4-digit numbers by 2-digit numbers

Year: 5/6

TTh	Th	H	T	O
	2	7	3	9
×			2	8
2	1	9	1	2
2	5	3	7	
5	4	7	8	0
1		1		
7	6	6	9	2

1





$$2,739 \times 28 = 76,692$$

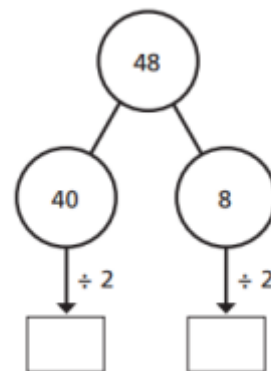
Division

Skill	Year	Representations and models	
Divide 2-digits by 1-digit (no exchange sharing)	3	Straws Base 10 Bar model	Place value counters Part-whole model
Divide 2-digits by 1-digit (sharing with exchange)	3	Straws Base 10 Bar model	Place value counters Part-whole model
Divide 2-digits by 1-digit (sharing with remainders)	3/4	Straws Base 10 Bar model	Place value counters Part-whole model
Divide 2-digits by 1-digit (grouping)	4/5	Place value counters Counters	Place value grid Written short division
Divide 3-digits by 1-digit (sharing with exchange)	4	Base 10 Bar model	Place value counters Part-whole model
Divide 3-digits by 1-digit (grouping)	4/5	Place value counters Counters	Place value grid Written short division
Divide 4-digits by 1-digit (grouping)	5	Place value counters Counters	Place value grid Written short division
Divide multi-digits by 2-digits (short division)	6	Written short division	List of multiples
Divide multi-digits by 2-digits (long division)	6	Written long division	List of multiples

Skill: Divide 2-digits by 1-digit (sharing with no exchange)

Year: 3

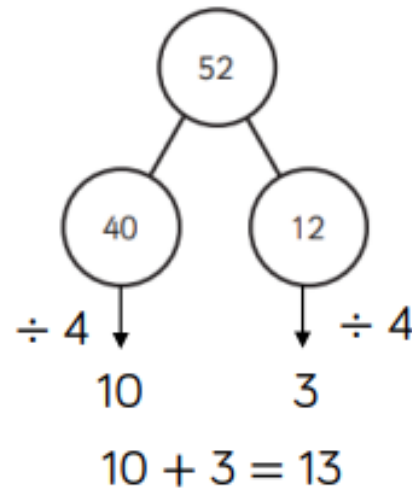
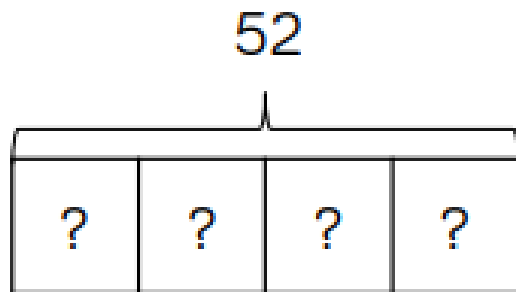
Tens	Ones
	
	



$$48 \div 2 = 24$$

Skill: Divide 2-digits by 1-digit (sharing with exchange)

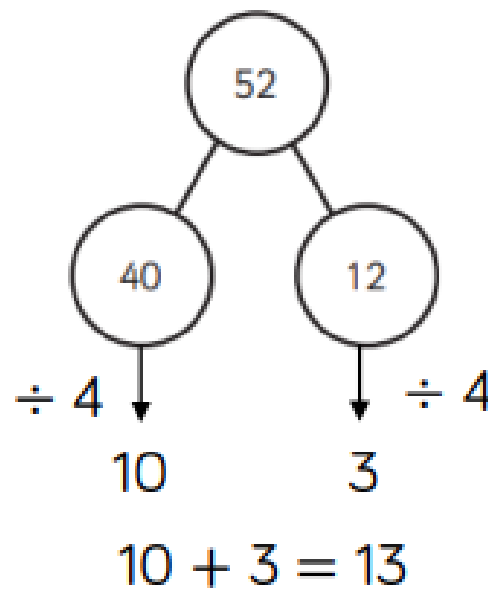
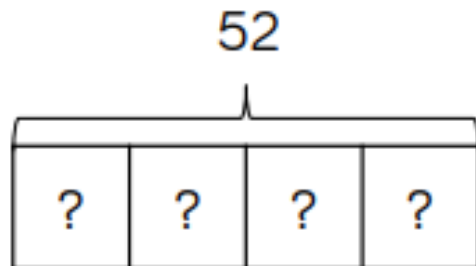
Year: 3/4



$$52 \div 4 = 13$$

Skill: Divide 2-digits by 1-digit (sharing with exchange)

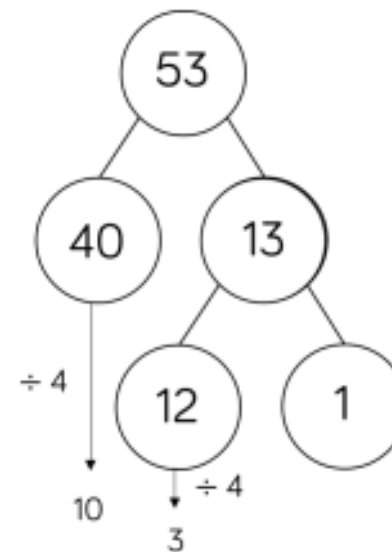
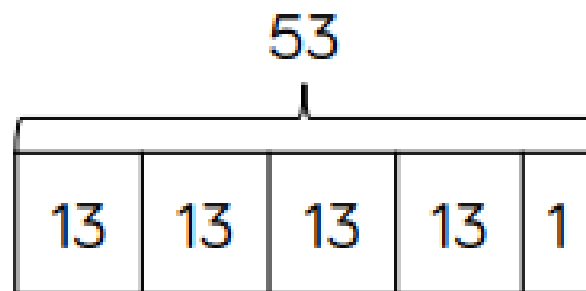
Year: 3/4



$$52 \div 4 = 13$$

Skill: Divide 2-digits by 1-digit (sharing with remainders)

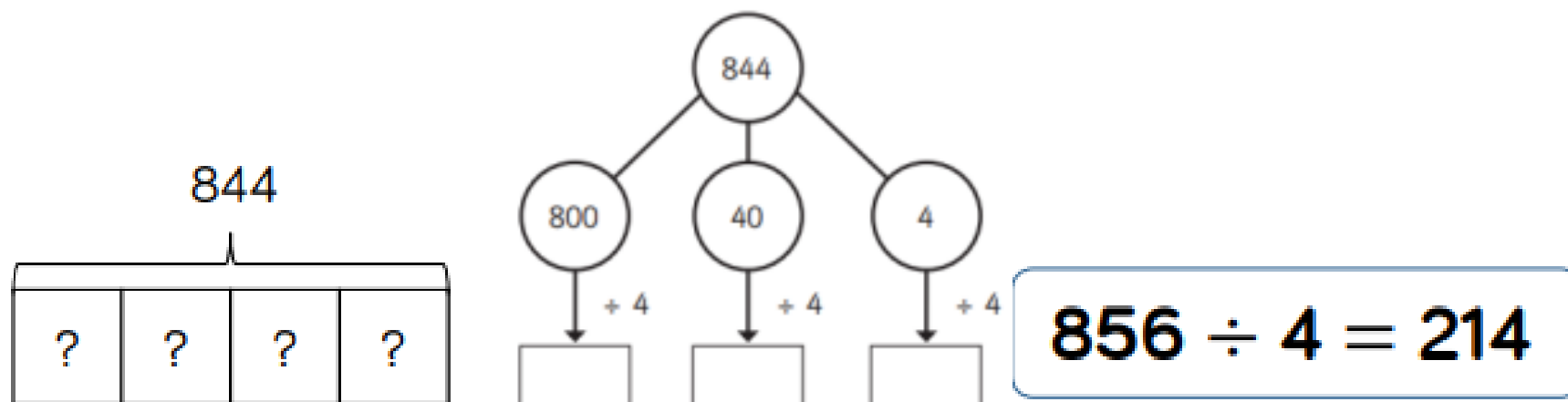
Year: 3/4



$$53 \div 4 = 13 \text{ r}1$$

Skill: Divide 3-digits by 1-digit (sharing)

Year: 4



Skill: Divide 3-digits by 1-digit (grouping)

Year: 5

		2	1	4
	4	8	5	¹ 6

$$856 \div 4 = 214$$

Skill: Divide 4-digits by 1-digit (grouping)

Year: 5

$$8,532 \div 2 = 4,266$$

$$432 \div 12 = 36$$

Skill: Divide multi digits by 2-digits (short division)

Year: 6

		0	3	6
	12	4	4	7
			3	2

$$432 \div 12 = 36$$

Skill: Divide multi-digits by 2-digits (long division)

Year: 6

		0	3	6
1	2	4	3	2
		3	6	0
			7	2
			7	2
				0

$12 \times 1 = 12$
 $12 \times 2 = 24$
 $12 \times 3 = 36$
 $12 \times 4 = 48$
 $12 \times 5 = 60$
 $12 \times 6 = 72$
 $12 \times 7 = 84$
 $12 \times 8 = 96$
 $12 \times 9 = 108$
 $12 \times 10 = 120$

$$432 \div 12 = 36$$

$$372 \div 15 = 24 \text{ r}12$$

		2	4	r	1	2
1	5	3	7	2		
		3	0	0		
			7	2		
			6	0		
			1	2		

$1 \times 15 = 15$
 $2 \times 15 = 30$
 $3 \times 15 = 45$
 $4 \times 15 = 60$
 $5 \times 15 = 75$
 $10 \times 15 = 150$

$$7,335 \div 15 = 489$$

	0	4	8	9
15	7	3	3	5
	6	0	0	0
	1	3	3	5
	1	2	0	0
		1	3	5
		1	3	5
				0

$1 \times 15 = 15$
 $2 \times 15 = 30$
 $3 \times 15 = 45$
 $4 \times 15 = 60$
 $5 \times 15 = 75$
 $10 \times 15 = 150$

		2	4	$\frac{4}{5}$
1	5	3	7	2
		3	0	0
			7	2
			6	0
			1	2

$$372 \div 15 = 24 \frac{4}{5}$$

