

LO: I can add and subtract

Revise

Add and Subtract Whole Numbers Using the Formal Written Method of Column Addition and Subtraction

We can use formal written methods for adding or subtracting large numbers. They are called columnar methods because the numbers are lined up underneath each other according to the place value columns.

Column Addition

Remember to add the digits in each column starting from the right-hand side.

Only write a single digit in the answer box of each place value column. If the total is more than nine, regroup into the next column.

When regrouping, remember to include this when adding the digits in the next column.

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



	TTh	Th	H	T	O
	2	14	15	1	
-		7	9	8	6
	2	7	6	4	2



Column Subtraction

Remember to subtract the digits in each column starting from the right-hand side.

You must always subtract the bottom number from the top number.

When the top digit is smaller than the bottom digit, remember to exchange from the next place value column.

LO: I can add and subtract

1. Write the missing digits to make these calculations correct.

		6		8
+	3		9	
	8	2	0	5

		5		9
-	1		7	
	4	0	8	1

2. Write the missing numbers to make these calculations correct.

$$7,040,030 = 7,000,000 + \boxed{} + 30$$

$$673,054 = 600,000 + \boxed{} + 54$$

3. In each row, tick the calculation that has the greater answer.

$69 + 383 =$	$393.7 + 58.38 =$
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$8,703 - 549 =$	$8,818.8 - 764.8 =$
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4. The numbers in this sequence decrease by the same amount each time. Write the next number in the sequence.

54,396, 53,846, 53,296, 52,746,

5. Tick the correct methods for calculating $359 - 94$ mentally, starting from 359.

subtract 100 then add 6	add 6 then subtract 90
subtract 6 then subtract 100	subtract 4 then subtract 90

LO: I can add and subtract

Practise

6. I have 4,561 stickers in my collection. I buy 3 large packs of stickers. Each large pack has 37 stickers. I add these to my collection. Then, I give 125 stickers to my brother. How many stickers do I have in my collection in total?

Show your method

stickers

7. At the start of the day, there were 2,874 computer games in the shop. During the day, 369 more computer games were delivered and 481 computer games were sold. How many computer games were left in the shop at the end of the day?

Show your method

games

8. There are 3,500 buttons in a tin. Two people take 375 buttons each. Three more people take 405 buttons each. How many buttons are left in the tin?

Show your method

buttons

LO: I can add and subtract

Practise

9.

I buy four magazines. Each magazine costs the same. I pay with a £20 note. My change is £7.76. What is the cost of one magazine?

Show your method

£

10.

This table shows the number of people going to the local cinema each month.

March	45,619
April	52,985
May	49,021
June	50,092

a) How many people, to the nearest thousand, went to the cinema in total over the four months?

Show your method

people

b) What is the difference, to the nearest hundred, between the number of people who went to the cinema in March and April?

Show your method

people

4

LO: I can add and subtract

1.	<table border="1"> <tr><td>4</td><td>6</td><td>0</td><td>8</td></tr> <tr><td>+</td><td>3</td><td>5</td><td>9</td></tr> <tr><td>8</td><td>2</td><td>0</td><td>5</td></tr> </table> <table border="1"> <tr><td>5</td><td>5</td><td>5</td><td>9</td></tr> <tr><td>-</td><td>1</td><td>4</td><td>7</td></tr> <tr><td>4</td><td>0</td><td>8</td><td>1</td></tr> </table>	4	6	0	8	+	3	5	9	8	2	0	5	5	5	5	9	-	1	4	7	4	0	8	1	10. a)	<table> <tr><td>46,000</td></tr> <tr><td>53,000</td></tr> <tr><td>49,000</td></tr> <tr><td>+ 50,000</td></tr> <tr><td>198,000 people</td></tr> </table>	46,000	53,000	49,000	+ 50,000	198,000 people
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+	3	5	9																													
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5	5	5	9																													
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3.	<table border="1"> <tr> <td>$69 + 383 = 452$</td> <td>$393.7 + 58.38 = 452.08$ ✓</td> </tr> <tr> <td>$8,708 - 549 = 8,154$ ✓</td> <td>$8,818.8 - 764.8 = 8,054$</td> </tr> </table>	$69 + 383 = 452$	$393.7 + 58.38 = 452.08$ ✓	$8,708 - 549 = 8,154$ ✓	$8,818.8 - 764.8 = 8,054$																											
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6.	$37 \times 3 = 111$ $4561 + 111 = 4672$ $4672 - 125 = 4547$ 4,547 stickers																															
7.	$2874 + 369 = 3243$ $3243 - 481 = 2762$ 2,762 games																															
8.	$375 \times 2 = 750$ $405 \times 3 = 1215$ $1215 + 750 = 1965$ $3500 - 1965 = 1535$ 1,535 buttons																															
9.	$£20.00 - £7.76 = £12.24$ $£12.24 + 4 = £3.06$ £3.06																															

Please only continue to the other slides if you are NOT coming into school at all.

LO: I can multiply and divide


	3	2	2		
		2	2		
			5	8	3
	x			4	9
	5	2	4	7	
2	3	3	2	0	
2	8	5	6	7	

We can use long multiplication when we are multiplying numbers that have **two or more digits**.

Multiply each digit in the top number by the first digit in the multiplier, regrouping and placing into the next column if necessary. Strike the regrouped numbers once you have your first answer so that you don't confuse any new regroupings.

On the next row, place a zero to show that you are about to multiply a power of ten. Then, multiply each digit in the top number by the next digit in the multiplier, regrouping and placing into the next column if necessary.

Finally, add the digits in each column using column addition to find the answer to the multiplication.



LO: I can multiply and divide

		0	2	8	4
1	5	4	2	6	0
	-	3	0		
		1	2	6	
	-	1	2	0	
				6	0

We can use long division when we are dividing a number by a **two-digit number** or larger.

Start by dividing the first two digits of the dividend by the divisor. Write the answer above the horizontal line and the multiple of the divisor under the dividend.

Use column subtraction to calculate the remainder and draw down the next digit of the dividend.

Repeat this process until the end of the calculation.



LO: I can multiply and divide

1. Write the missing digits to make these calculations correct.

$$\begin{array}{r} 6 \square 8 \\ \times \quad \square \\ \hline 4 \ 3 \ 9 \ 6 \end{array}$$

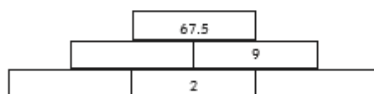
$$\begin{array}{r} 9 \square 5 \\ 5 \overline{) 4 \ 9 \ 2 \ \square} \end{array}$$

2. Write the missing numbers to make these calculations correct.

$$405 \div \square = 90$$

$$\square \times 15 = 600$$

3. Here is a number pyramid. The number in each box is the product of the two numbers below it. Write the missing numbers.



4. Write the correct symbol, <, > or =, in each box to make the statements correct.

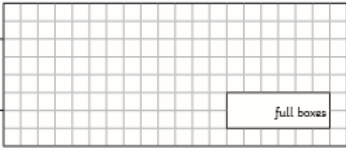
$$12 \times 12 \square 14 \times 10$$

$$150 \div 50 \square 210 \div 70$$

LO: I can multiply and divide

5. A shopkeeper is packing eggs. Each box holds 8 eggs. The farmer has 1,230 eggs. How many full boxes can the farmer pack?

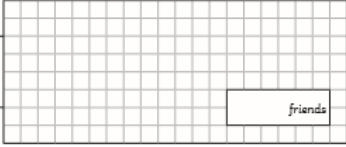
Show your method



full boxes

6. A group of friends earn £161 by washing cars. They share the money equally. They get £23 each. How many friends are in the group?

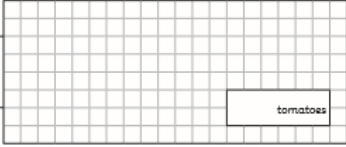
Show your method



friends

7. A box contains trays of tomatoes. There are 45 tomatoes in a tray. There are 4 trays in a box. A supermarket sells 50 boxes of tomatoes. How many tomatoes does the supermarket sell?

Show your method




tomatoes

LO: I can multiply and divide

8. There are 34 pupils in a class. The teacher has 7 litres of orange juice. She pours 180 millilitres of orange juice for every pupil. How much orange juice is left over?

Show your method



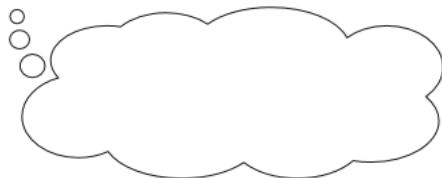
9. Write the missing numbers to make this multiplication grid correct.

\times		
8	72	96
	54	

10. I buy some apples at the shop. I can buy 12 individual apples for 57p each or a bag of 12 apples for £6.50. Which is the cheaper option? Explain your reasoning.

12 individual apples for 57p

A bag of 12 apples for £6.50



11. Three toy cars cost the same as two teddy bears. One teddy bear costs £3.75. How much does one toy car cost?

Show your method

£

12. Write the missing numbers to make these calculations correct.

$$(100 - \boxed{}) \times 3 = 165 \qquad (200 + \boxed{}) \div 4 = 60$$

13. Here are five number cards. Use three of the number cards to make this calculation correct.

18	10	2	5	7
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(+) × = 50

14. Write the correct symbol, $<$, $>$ or $=$, in each box to make the statements correct.

$(43 + 56) - 32$		$(93 + 32) - 56$
$9 \times (38 + 12)$		$(9 \times 12) \times 4$

LO: I can multiply and divide

1.

	6	2	8
×			7
	4	3	9

		9	8	5
5	4	9	2	5

2. 4.5
 40

3.

	67.5	
	7.5	9
3.75	2	4.5

4. 12×12 > 14×10
 $150 \div 50$ = $210 \div 70$

5. $1230 \div 8 = 153.75$
153 full boxes

6. $161 \div 23 = 7$
7 friends

7. $45 \times 4 = 180$
 $180 \times 50 = 9000$
9,000 tomatoes

8. $34 \times 180 = 6120$
 $7000 - 6120 = 880$
880 ml

9.

×	9	12
8	72	96
6	54	72

10.

12 individual apples for 57p

A bag of 12 apples for £6.50

Accept any explanation which shows that a bag of apples is 34p cheaper than the individual apples. For example, $57p \times 12 = 684p = £6.84$. This is 34p more expensive than buying one pack for £6.50.

11. Two teddy bears = $2 \times £3.75 = £7.50$
One toy car = $£7.50 \div 3 = £2.50$
£2.50

12. $(100 - 45) \times 3 = 165$
 $(200 - 40) \div 4 = 60$

13. $(18 + 7) \times 2 = 50$

14.

$(43 + 56) - 32$	<	$(93 + 32) - 56$
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$9 \times (38 + 12)$	>	$(9 \times 12) \times 4$
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LO: I can multiply and divide