



11+ MATHEMATICS

Arithmetic Methods Revision Sheet

Key facts · Method · Worked example · Quick check

Fast, accurate written methods save time for the harder questions. These are the methods to practise until they are automatic.

Key facts

Column addition	Line up the units. Carry into the next column when a column adds to 10 or more.
Column subtraction	Line up the units. Borrow from the next column when the top digit is smaller.
Short multiplication	Multiply each digit, carrying as you go. Use a placeholder zero when multiplying by tens.
Short division	Divide each digit from the left, carrying remainders to the next digit.
Order of operations	Brackets, then powers, then $\times$ and $\div$, then $+$ and $-$.

Method: column subtraction with borrowing

- 1 Write the numbers in columns, units under units.
- 2 Start at the units. If the top digit is smaller, borrow 1 from the next column.
- 3 Subtract each column, moving left.
- 4 Check by adding your answer to the number you subtracted.

Common mistakes

Watch out: Borrowing across a zero and forgetting to change it to 9.

Watch out: Forgetting the placeholder zero when multiplying by tens.

Watch out: Working left to right instead of following the order of operations.

Worked example

Calculate $3,406 - 1,758$.

Step	What to do	Working
1	Units: $6 - 8$, borrow from the tens (0), so borrow from the hundreds	$16 - 8 = 8$
2	Tens: the 0 became 10, then 9 after lending	$9 - 5 = 4$
3	Hundreds: 4 became 3	$3 - 7$, borrow: $13 - 7 = 6$
4	Thousands: 3 became 2	$2 - 1 = 1$
5	Check	$1,648 + 1,758 = 3,406 \checkmark$
✓	Answer	1,648

Column subtraction: $3,406 - 1,758$

	Th	H	T	U	
	2	3	9	16	
	~~3~~	~~4~~	~~0~~	~~6~~	Red: borrowed values
-	1	7	5	8	
	1	6	4	8	= 1,648

Quick check

	Question	Your answer
1	Calculate $487 + 365$	
2	Calculate 23×14	
3	Calculate $1,236 \div 4$	

Answers: 1) 852 2) 322 3) 309

Put your arithmetic methods skills to the test.

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