

Max's Magnificent Subtraction Challenge

Learning objective: To subtract numbers with up to four digits using formal written methods, including column subtraction with exchanges.

Read each flashcard carefully. Try to solve the problem in your head or on a piece of paper before checking the answer on the other side. Max the monkey says: 'Always start with the ones column!'

What is the 'difference' in subtraction?

The difference is the result of subtracting one number from another, showing how much greater one value is than the other.

Calculate: $4,582 - 2,341$

2,241

If you have $500 - 245$, why must you exchange from the hundreds column?

Because there are zero ones and zero tens, so you must exchange one hundred for ten tens, then one ten for ten ones.

Solve: $8,020 - 1,564$

6,456

True or False: In subtraction, the order of the numbers does not matter. Explain why.

False. Subtraction is not commutative; changing the order changes the result (e.g., $5 - 3$ is not the same as $3 - 5$).

Max has £85.50 and spends £22.75 on a maths puzzle book. How much change does he have?

£62.75

What is the missing number? $7,000 - [?] = 4,321$

2,679

Compare and contrast: How is column subtraction similar to addition?

Both methods require careful alignment of place value columns (ones, tens, hundreds, thousands) and working from right to left.

Justify your answer: Is $9,999 - 1,000$ the same as $10,000 - 1,001$?

Yes. Both calculations result in 8,999. This is because both numbers in the second pair were increased by 1, keeping the difference the same.

What might happen if you forget to record an exchange during a column subtraction?

You will get an incorrect answer because the place value of the digits will not be represented accurately.

Calculate: $6,105 - 3,482$

2,623

Explain why it is helpful to use the inverse operation to check your subtraction answers.

Adding the difference to the subtrahend should equal the original minuend, which confirms your calculation is accurate.