

Lesson Eight

I can subtract two 4-digit numbers - with more than one exchange

Problem Solving and Reasoning

Now you have practised subtracting two numbers with more than one exchange, it is time to start using this skill to problem solve and reason.

Reasoning:

Ruby has used column subtraction to solve this calculation.

	7	0	89	12
-	5	6	3	5
	2	4	5	5

Is Ruby correct?
Explain how you know.

Reasoning: Practise

Ruby has used column subtraction to solve this calculation.

Is Ruby correct?
Explain how you know.

Top tip:

Work out the problem yourself
how you normally would.

$$7092 - 5635 =$$

What answer did you get?

What did they do wrong?

	7	0	89	12
-	5	6	3	5
	2	4	5	5

Reasoning: Answer

Ruby has used column subtraction to solve this calculation.

0 - 6 - 4?

This is incorrect. She hasn't exchanged from the thousands.

Is Ruby correct?
Explain how you know.

	7	0	89	12
-	5	6	3	5
	2	4	5	5

"Ruby is incorrect because she has not exchanged from the thousands. She has also subtracted from the ones incorrectly."

The correct answer would be:

	67	10	89	12
-	5	6	3	5
	1	4	5	7

Did you
get it
correct?

Problem Solving: Help George complete the calculation.

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	4	8	3	5

The *largest number must have zero in the hundreds column and there must be two exchanges.*"

Use the information you have been given to start.

Possible answers include:

$$6,045 - 1,192 = 4,835$$

$$7,048 - 2,195 = 4,835$$

$$8,092 - 3,239 = 4,835$$

Try and complete the
reasoning and
problem-solving
activities on
worksheet 8.