Reasoning and Problem Solving
Step 13: Subtract with 2-Digits 1

National Curriculum Objectives:

Mathematics Year 2: (2C2b) Add and subtract numbers using concrete objects and pictorial representations, including: two two-digit numbers
Mathematics Year 2: (2C4) Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods

Differentiation:

Questions 1, 4 and 7 (Reasoning)
Developing Explain the mistake in a given calculation using knowledge of subtracting a 2-digit number from a 2-digit number. No exchanges; each question includes Base 10 within a place value chart.
Expected Explain the mistake in a given subtraction using knowledge of subtracting a 2-digit number from a 2-digit number. No exchanges; includes place value counters and place value charts.
Greater Depth Explain the mistake in a given calculation using knowledge of subtracting a 2-digit number from a 2-digit number. No exchanges; numerals and words used.

Questions 2, 5 and 8 (Problem Solving)
Developing Calculate the missing number from the subtraction calculation. No exchanges; each question includes Base 10 within a place value chart.
Expected Calculate the missing number from the subtraction calculation. No exchanges; includes place value counters and place value charts.
Greater Depth Calculate the missing number from the subtraction calculation. No exchanges; includes part-whole models and numerals written in words.

Questions 3, 6 and 9 (Reasoning)
Developing Identify and explain whether the answer is correct using the information given. No exchanges; each question includes Base 10 within a place value chart.
Expected Identify and explain whether the answer is correct using the information given. No exchanges; includes the use of column method.
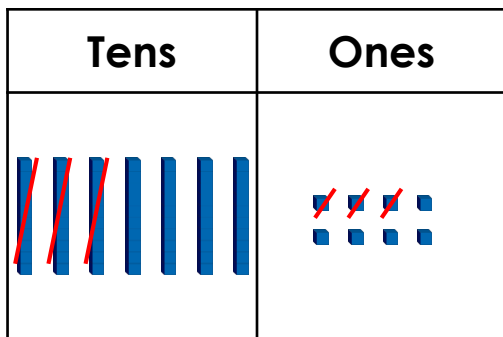Greater Depth Identify and explain whether the answer is correct using the information given. No exchanges; bar models, numerals and words used.

More Year 2 Addition and Subtraction resources.

Did you like this resource? Don't forget to review it on our website.

1a. Explain the mistake below.

Tens	Ones

$$78 - 34 = 44$$
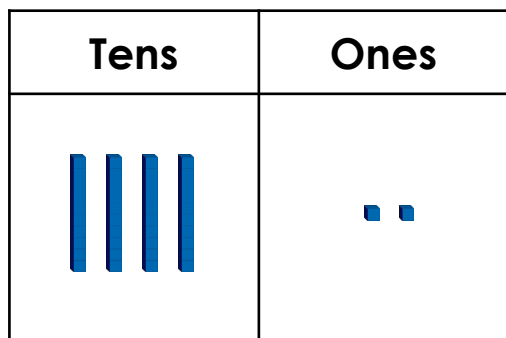
R

1b. Explain the mistake below.

Tens	Ones
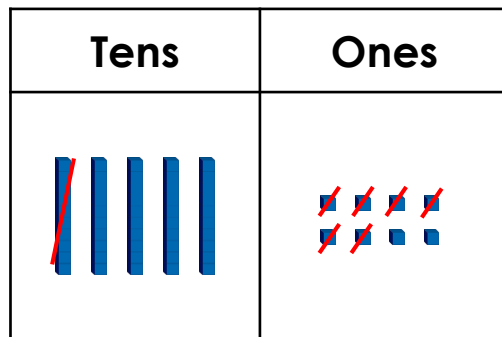
$$58 - 16 = 43$$

R

2a. Joan has subtracted a number from 53. She has put Base 10 into a place value chart to show her answer.
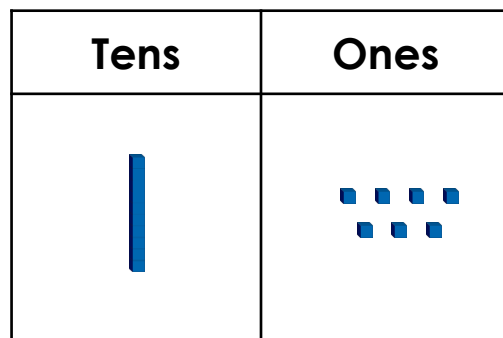
Tens	Ones

What number did she subtract?

PS

2b. Trevor has subtracted a number from 49. He has put Base 10 into a place value chart to show his answer.

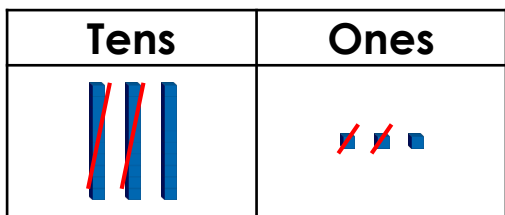| Tens	Ones

What number did he subtract?

PS

3a. Tom says this about the chart below.

> The answer will have 1 ten because if I subtracted 2 tens from 3 tens, I would have 1 ten left.

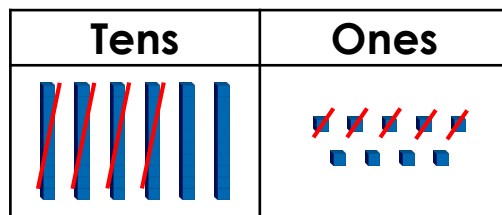| Tens	Ones

Is Tom correct? Explain your answer.

PS

3b. Lynn says this about the chart below.

> The answer will have 5 ones because if I subtracted 5 ones from 9 ones, I would have 5 ones left.

Tens	Ones

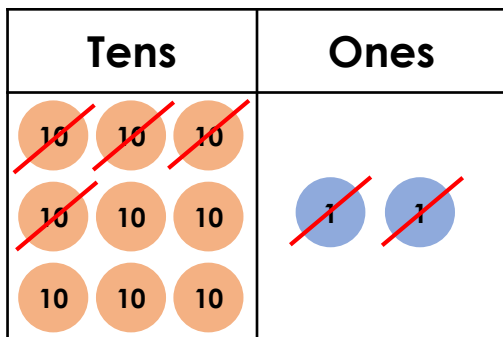Is Lynn correct? Explain your answer.

PS

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Reasoning and Problem Solving – Subtract with 2-Digits 1 – Year 2 Developing

4a. Explain the mistake below.

Tens	Ones
10 10 10	
10 10 10	1 1
10 10 10	

(three tens crossed out, both ones crossed out)

$$92 - 42 = 51$$

E R

4b. Explain the mistake below.

Tens	Ones
10 10 10	1 1 1
10 10	1 1 1
	1 1 1

(one ten crossed out, top row of ones crossed out)
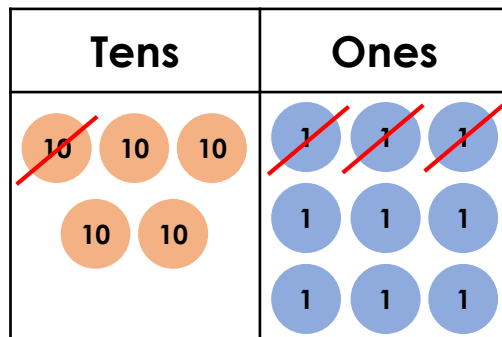
$$59 - 23 = 36$$

E R

5a. Ian has subtracted a number from 78. He has put counters into a place value chart to show his answer.
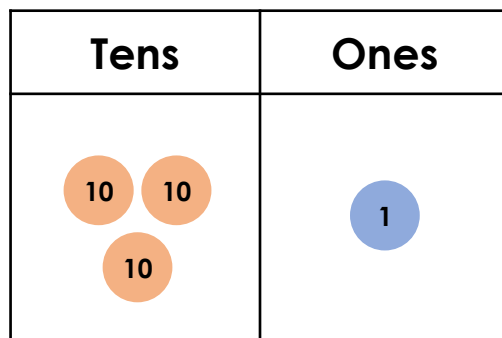
Tens	Ones
10 10	1 1

What number did he subtract?

E PS

5b. Sue has subtracted a number from 65. She has put counters into a place value chart to show her answer.

Tens	Ones
10 10	1
10	

What number did she subtract?

E PS

6a. Hans says this about the calculation below.

> The answer is 20 because if I subtracted 7 tens from 5 tens, I would have 2 tens left.

```
    7  4
 -  5  3
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```

Is Hans correct? Explain your answer.

E PS

6b. Lori says this about the calculation below.

> The answer will have 5 ones because if I subtracted 1 one from 6 ones, I would have 5 ones left.

```
    6  6
 -  2  1
 --------
```

Is Lori correct? Explain your answer.

E PS

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7a. Explain the mistake below.

> Four tens subtracted from nine tens is four tens.
> 2 ones subtract two ones is zero.
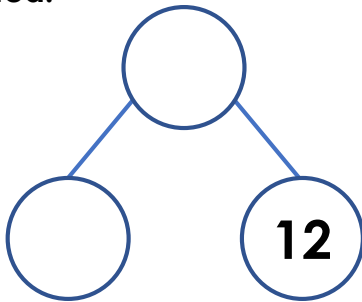> The answer is 40.

R

7b. Explain the mistake below.

> Six tens subtracted from eight tens is 2 tens.
> 8 ones subtract 3 ones is six ones.
> The answer is 26.

R

8a. Ben has subtracted a number from seventy-four. Use the part-whole model below to work out what number he subtracted.
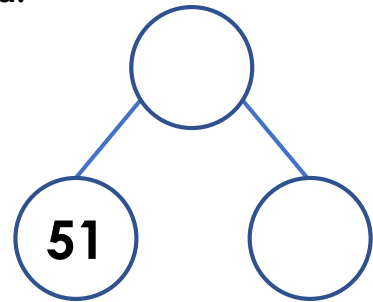
12

What number did he subtract?

PS

8b. Fliss has subtracted a number from eighty-three. Use the part-whole model below to work out what number she subtracted.
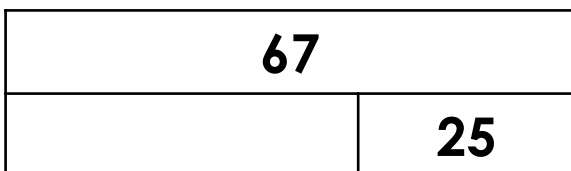
51

What number did she subtract?

PS

9a. Adam says this about the bar model below.

> The missing number is 82 because if I subtracted five ones from seven ones, I would have two ones left.

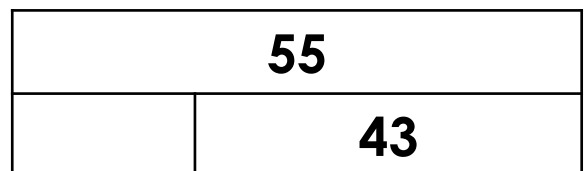| 67	
	25

Is Adam correct? Explain your answer.

PS

9b. Aisha says this about the bar model below.

> The missing number is 18 because if I subtracted four tens from five tens, I would have one ten left.

55	
	43

Is Aisha correct? Explain your answer.

PS

Reasoning and Problem Solving
Subtract with 2-Digits 1

Developing

1a. 33 has been subtracted in the chart instead of 34 as shown in the calculation.

2a. 11

3a. Tom is correct because he has correctly subtracted the tens column.

Expected

4a. The calculation is 92 – 42 which equals 50, not 51 as all of the ones have been subtracted.

5a. 56

6a. Hans is incorrect because although he has subtracted the tens correctly, he has subtracted the ones incorrectly. The answer should be 21, not 20.

Greater Depth

7a. Four tens subtracted from nine tens is five tens, not four tens. The answer should be 50, not 40.

8a. 74 should be in the whole; the number he subtracted is 62.

9a. Adam is incorrect because although he has subtracted the ones correctly, he has added the tens instead of subtracting them. The answer should be 42, not 82.

Developing

1b. The answer should be 42 instead of 43 as the ones have not been calculated accurately.

2b. 32

3b. Lynn is incorrect because the answer would only have 4 ones, not 5 ones.

Expected

4b. 2 tens should have been subtracted in the place value chart instead of 1.

5b. 34

6b. Lori is correct because she has subtracted the ones accurately. The answer is 45 which has 5 ones.

Greater Depth

7b. 8 ones subtract 3 ones is five ones, not six ones. The answer should be 25, not 26.

8b. 83 should be in the whole; the number she subtracted is 32.

9b. Aisha is incorrect because although she has subtracted the tens correctly, she has added the ones instead of subtracting them. The answer should be 12, not 18.

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