Reasoning and Problem Solving
Step 7: Subtract Tens from 3 Digits

National Curriculum Objectives:

Mathematics Year 3: (3C1) Add and subtract numbers mentally, including three-digit number and ones three-digit number and tens three-digit number and hundreds
Mathematics Year 3: (3C2) Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
Mathematics Year 3: (3C3) Estimate the answer to a calculation and use inverse operations to check answers
Mathematics Year 3: (3C4) Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Complete the subtraction calculation to match the pictorial representation. Includes subtracting multiples of ten, up to 90, from a 3-digit number, includes exchanging. Using Base 10 and numerals only. Scaffolding provided.
Expected Write the subtraction calculation to match the pictorial representation. Includes subtracting multiples of ten, up to 90, from a 3-digit number, includes exchanging. Using place value counters and grids. Some scaffolding provided.
Greater Depth Write five possible subtraction calculations to match the pictorial representation of the answer. Includes subtracting two multiples of ten, up to 90, from a 3-digit number, includes exchanging. Using numerals, words and a variety of representations.

Questions 2, 5 and 8 (Reasoning)
Developing Prove which answer to a subtraction calculation is correct. Includes calculations as outlined for Question 1.
Expected Prove if the answer to a subtraction calculation is correct. Includes calculations as outlined for Question 4.
Greater Depth Prove if the answer to a subtraction calculation is correct. Includes calculations as outlines for Question 7, with representations including bar models.

Questions 3, 6 and 9 (Problem Solving)
Developing Identify the number subtracted in a calculation. Includes 3 multiple-choice options and calculations as outlined for Question 1.
Expected Work out the number subtracted in a calculation. Includes calculations as outlined for Question 4.
Greater Depth Work out the number subtracted in a calculation. Includes calculations as outlined for Question 7.

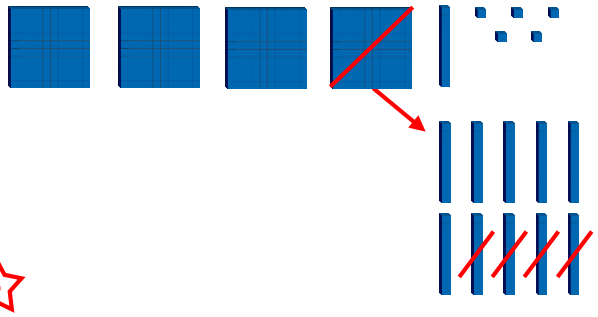
More Year 3 Addition and Subtraction resources.

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

Subtract Tens from 3 Digits

1a. Complete the subtraction calculation to match the subtraction represented below.

415 – ☐ = ☐



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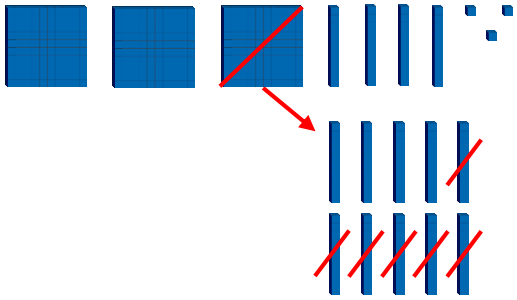
PS

Subtract Tens from 3 Digits

1b. Complete the subtraction calculation to match the subtraction represented below.

343 – ☐ = ☐



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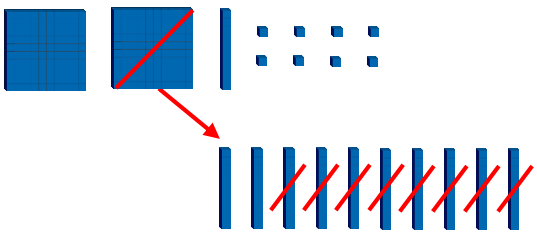
PS

2a. Kate and Sam are calculating the following subtraction: 218 – 80.



Kate thinks the answer is 138.

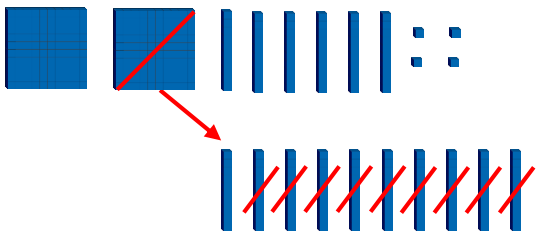
Sam thinks the answer is 128.

Who is correct? Explain your reasoning.

D

R

2b. Harry and Jess are calculating the following subtraction: 264 – 90.



Harry thinks the answer is 174.

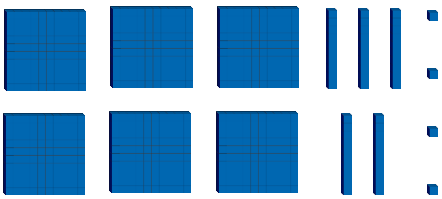
Jess thinks the answer is 154.

Who is correct? Explain your reasoning.

D

R

3a. I subtracted a number from the one shown below.



My answer is 594.

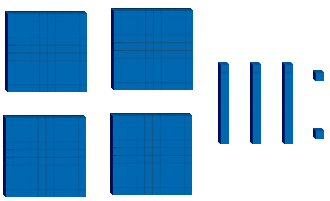
Circle the number that I subtracted.

50 60 70

D

PS

3b. I subtracted a number from the one shown below.



My answer is 362.

Circle the number that I subtracted.

80 70 60

D

PS

Subtract Tens from 3 Digits

Subtract Tens from 3 Digits

4a. Write the subtraction calculation to match the subtraction represented below.

H	T	O
100 ~~100~~	10 10 10 10 10 10 ~~10~~ ~~10~~ ~~10~~ ~~10~~	1 1 1

E PS

4b. Write the subtraction calculation to match the subtraction represented below.

H	T	O
100 100 ~~100~~	10 10 10 10 10 ~~10~~ ~~10~~ ~~10~~ ~~10~~	1 1 1 1 1 1

E PS

5a. Isla is calculating the following subtraction: 475 – 80.

100 100 ~~10~~ ~~10~~ ~~10~~ ~~10~~ 1 1

100 100 ~~10~~ ~~10~~ ~~10~~ 1 1 1

She says,

The answer is 405.

Is she correct? Explain your reasoning.

E R

5b. Jack is calculating the following subtraction: 538 – 70.

100 100 100 10 ~~1~~ ~~1~~ ~~1~~ ~~1~~

100 100 10 10 1 ~~1~~ ~~1~~ ~~1~~

He says,

The answer is 531.

Is he correct? Explain your reasoning.

E R

6a. I subtracted a number from the one shown in the place value grid.

H	T	O
100 100 100 100 100	10 10 10	1 1 1 1

My answer is 444.

What number did I subtract?

E PS

6b. I subtracted a number from the one shown in the place value grid.

H	T	O
100 100 100 100 100 100	10 10 10 10 10	1 1 1

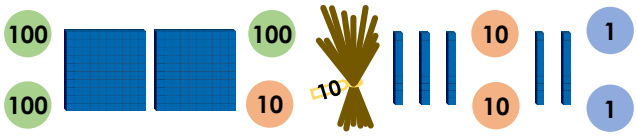
My answer is 573.

What number did I subtract?

E PS

Subtract Tens from 3 Digits

7a. The number below is the answer to a subtraction calculation:



Write five subtraction calculations which could have created this number.

The largest number must have 3 digits and two multiples of ten must be subtracted.

GD

PS

8a. Rita is calculating the following subtraction: 418 – sixty – thirty.

418		
sixty	thirty	?

She says,

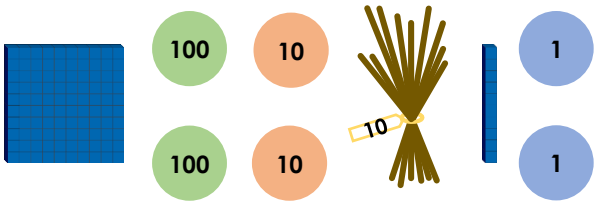
The answer is 338.

Is she correct? Explain your reasoning.

GD

R

9a. I subtracted two multiples of ten from the number shown below.



My answer is 272.

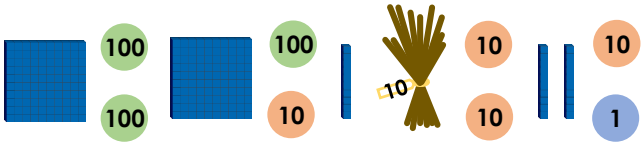
What numbers could I have subtracted?

Find 3 possibilities.

GD

PS

7b. The number below is the answer to a subtraction calculation:



Write five subtraction calculations which could have created this number.

The largest number must have 3 digits and two multiples of ten must be subtracted.

GD

PS

8b. Danny is calculating the following subtraction: 309 – forty – fifty.

309		
forty	fifty	?

He says,

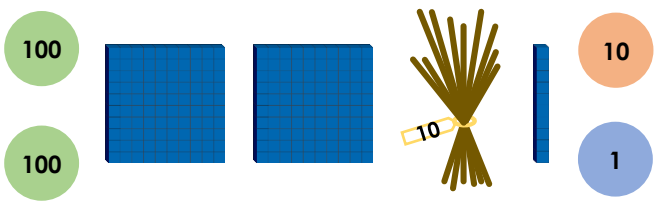
The answer is 209.

Is he correct? Explain your reasoning.

GD

R

9b. I subtracted two multiples of ten from the number shown below.



My answer is 351.

What numbers could I have subtracted?

Find 3 possibilities.

GD

PS

Reasoning and Problem Solving
Subtract Tens from 3 Digits

Developing

1a. 415 – 40 = 375

2a. Kate is correct. She has subtracted the correct number of tens and counted the remaining Base 10 correctly.

3a. 60

Expected

4a. 213 – 40 = 173

5a. Isla is not correct because she has only subtracted 70. She needs to exchange a hundreds counter for 10 tens counters. The correct answer is 395.

6a. 90

Greater Depth

7a. Various answers, for example 612 – 10 – 10 = 592, 622 – 10 – 20 = 592, 632 – 20 – 20 = 592, 642 – 30 – 20 = 592, 652 – 40 – 20 = 592

8a. Rita is not correct because she has only subtracted 80. She needs to subtract 90 altogether. 418 – 90 = 328

9a. Possible answers: 10 and 60, 20 and 50, 30 and 40

Reasoning and Problem Solving
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Developing

1b. 343 – 60 = 283

2b. Harry is correct. He has subtracted the correct number of tens and counted the remaining Base 10 correctly.

3b. 70

Expected

4b. 326 – 50 = 276

5b. Jack is not correct because he has subtracted 7 instead of 70. The correct answer is 468.

6b. 80

Greater Depth

7b. Various answers, for example: 601 – 10 – 10 = 581, 611 – 10 – 20 = 581, 621 – 30 – 10 = 581, 631 – 20 – 30 = 581, 641 – 30 – 30 = 581

8b. Danny is not correct because he has subtracted 100. He needs to subtract 90 altogether. 309 – 90 = 219

9b. Possible answers: 10 and 70, 20 and 60, 30 and 50, 40 and 40