Add a Two-digit and Three-digit Number – Crossing 10 or 100

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Fluency & Reasoning Teaching Slides

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Add a Two-digit and Three-digit Number – Crossing 10 or 100

Here is 38 + 452 = ? shown using base 10. Can you see the numbers shown below? Add the amounts together.

| Hundreds | Tens | Ones |
|----------|------|------|
| | | |
| | | |
| | | |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

Did you get this? When we add them together we have 10 ones which we can't have in the ones column so we need to put those ten in the tens column by adding another ten rod to the tens.

| Hundreds | Tens | Ones |
|----------|------|------|
| | | |
| | | |
| | | |
| | | |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

So, 38 + 452 = 490

| Hundreds | Tens | Ones |
|----------|------|------|
| | | |
| | | |
| | | |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

Draw the calculations using base 10. How many 100 squares, tens rods and ones? Work out the answers.

$$357 + 53$$

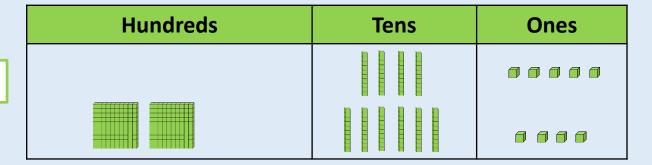
$$864 + 99$$

$$275 + 25$$

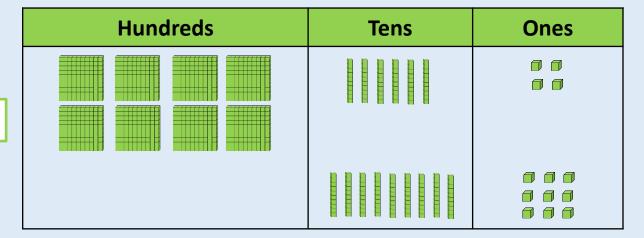
Add a Two-digit and Three-digit Number – Crossing 10 or 100

Did you get these answers?

$$45 + 264 = 309$$



| 064 | | 00 | | \sim | c - |
|-----|---|----|---|--------|-----|
| 864 | + | 99 | = | 4 | hЗ |



Add a Two-digit and Three-digit Number – Crossing 10 or 100

And these?

$$329 + 68 = 397$$

$$357 + 53 = 410$$

$$275 + 25 = 300$$



| Hundreds | Tens | Ones |
|----------|------|------|
| | | |
| | | |

| Hundreds | Tens | Ones |
|----------|------|------|
| | | |
| | | |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

Let's remember how to use column addition.
Remember: start adding the ones, then tens then hundreds.

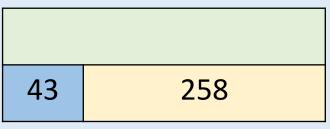
So, 8 + 3 = 11. We put the 1 of the 11 under the tens column.

| 43 | 258 |
|----|-----|

| | H | Т | 0 |
|---|---|---|---|
| | 2 | 5 | 8 |
| + | | 4 | 3 |
| | | | 1 |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

Then, we add 5 + 4 + 1 = 10. The 1 of the ten goes under the hundreds column.



| | Н | Т | 0 |
|---|---|---|---|
| | 2 | 5 | 8 |
| + | | 4 | 3 |
| | | 0 | 1 |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

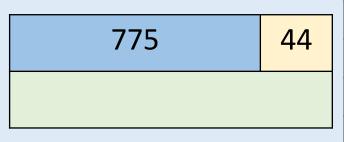
Then, we add 2 + 1 = 3So the answer is 301.

| 301 | | |
|-----|-----|--|
| 43 | 258 | |

| | Η | Т | 0 |
|---|---|---|---|
| | 2 | 5 | 8 |
| + | | 4 | 3 |
| | 3 | 0 | 1 |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

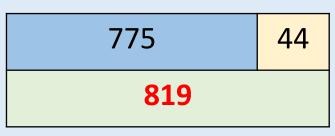
How did you do? Have a go at this one!

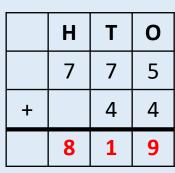


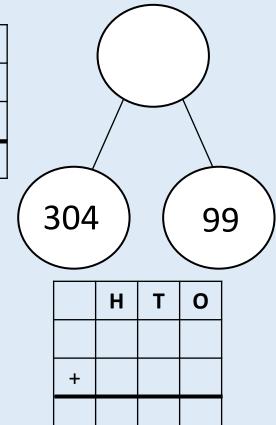
| | Н | T | 0 |
|---|---|---|---|
| | 7 | 7 | 5 |
| + | | 4 | 4 |
| | | | |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

How did you do? Have a go at the part whole model one.

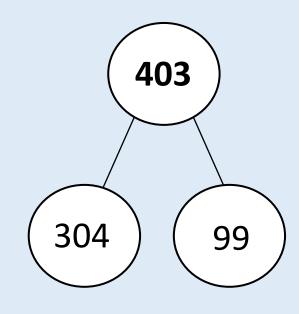






Add a Two-digit and Three-digit Number – Crossing 10 or 100

How did you do?



| | Н | Т | 0 |
|---|---|---|---|
| | 3 | 0 | 4 |
| + | | 9 | 9 |
| | 4 | 0 | 3 |

Add a Two-digit and Three-digit Number – Crossing 10 or 100

Solve these calculations using column addition.

$$67 + 567$$

$$647 + 33$$

$$777 + 55$$

$$835 + 86$$

Add a Two-digit and Three-digit Number – Crossing 10 or 100

How did you do?

$$67 + 567$$

| | Ή | Т | 0 |
|---|---|---|---|
| | | 6 | 7 |
| + | 5 | 6 | 7 |
| | 6 | 3 | 4 |

1

$$647 + 33$$

1

| | Н | T | 0 |
|---|---|---|---|
| | 7 | 7 | 7 |
| + | | 5 | 5 |
| | 8 | 3 | 2 |
| | 1 | 1 | |

| | Н | Т | 0 |
|---|---|---|---|
| | 8 | 3 | 5 |
| + | | 8 | 6 |
| | 9 | 2 | 1 |
| | 1 | 1 | • |

Malachi is working out 265 + 67.



265 + 67 = 222

Here is his working out:

| | Н | Т | 0 |
|---|---|---|---|
| | 2 | 6 | 5 |
| + | | 6 | 7 |
| | 2 | 2 | 3 |

Is he correct? Explain why.

Add a Two-digit and Three-digit Number – Crossing 10 or 100

Malachi is working out 265 + 67.





Here is his working out:

| | Н | Т | 0 |
|---|---|---|---|
| | 2 | 6 | 5 |
| + | | 6 | 7 |
| | 2 | 2 | 2 |

Is he correct? Explain why.

Malachi is incorrect because he has not exchanged 10 ones for 1 ten or 10 tens for 1 hundred.

The answer should be 332.

Malachi