

Subtract 2-digit numbers from 3-digit numbers – crossing 10 or 100



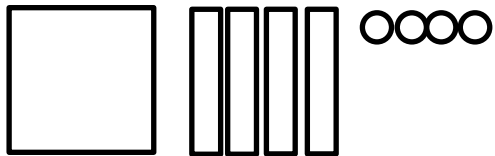
Draw base 10 for the number 142 using squares for hundreds, rods for tens and circles for ones.





Draw base 10 for the number 142 using squares for hundreds, rods for tens and circles for ones.

Did you draw this?

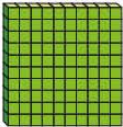
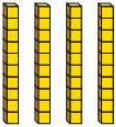



$$142 - 17 = ?$$



Let's use the chart to....

Subtract 17 from 142

Hundreds	Tens	Ones
		

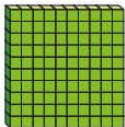
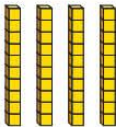



$$142 - 17 = ?$$



Can we take 7 ones from 2 ones?

Subtract 17 from 142

Hundreds	Tens	Ones
		

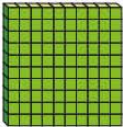
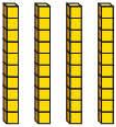



$$142 - 17 = ?$$



No What do we need to do?

Subtract 17 from 142

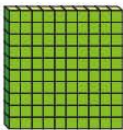
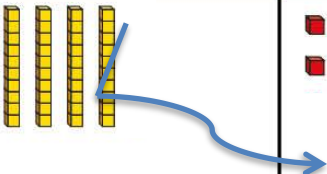
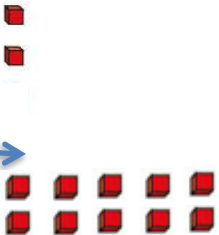
Hundreds	Tens	Ones
		



$$142 - 17 = ?$$



We exchange a ten for 10 ones to make 12 ones.
What do we do now?

Hundreds	Tens	Ones
		

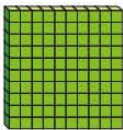
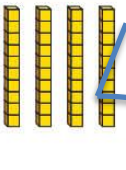
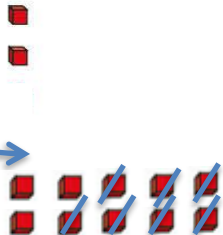


$$142 - 17 = ?$$



We can take 7 ones from 12 ones.

$$12 - 7 = ?$$

Hundreds	Tens	Ones
		

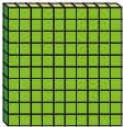
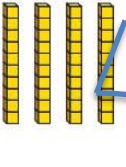
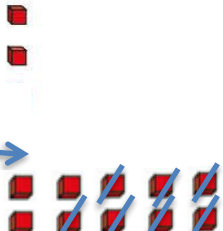


$$142 - 17 = ?$$



$$12 - 7 = 5$$

What is the final answer?


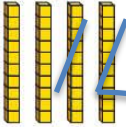
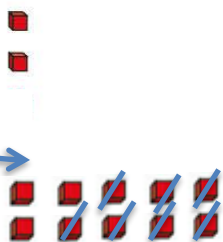
Hundreds	Tens	Ones
		



$$142 - 17 = 125$$



Did you get 125?

Hundreds	Tens	Ones
		



I b) Complete the column subtraction.

		H	T	O	
		2	4	4	
	–		2	6	
		<hr/>			
		<hr/>			

I b) Complete the column subtraction.

		H	T	O	
		2	4 ³	¹ 4	
	-		2	6	
		2	1	8	

Did you notice we can't take 6 from 4?

Did you exchange a ten for ten ones?

Did you get the final answer?



2

Work out $314 - 71$

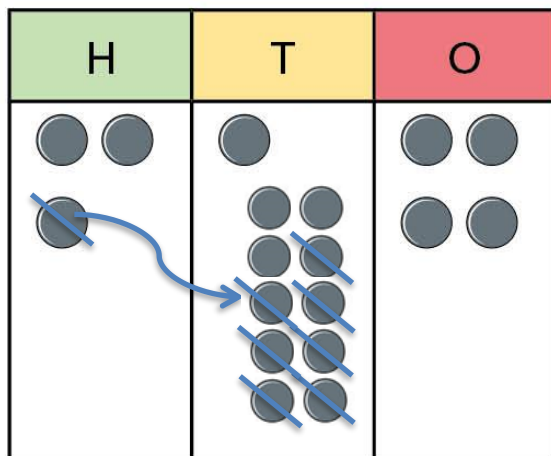
H	T	O
● ●	●	● ●
●		● ●

		H	T	O	
		3	1	4	
	-		7	1	



2

Work out $314 - 71$



		H	T	O	
		3 ²	¹ 1	4	
	-		7	1	
		2	4	3	

Did you notice we can't take 7 from 1?
 Did you exchange a hundred for 10 tens?
 Did you get the final answer?

4 A film is shown 3 times in a day.

The table shows how many children watch each showing.

Showing time	11 am	3 pm	7 pm
Number of children	381	184	67

How many more children watch the 11 am showing than the 7 pm showing?

REMEMBER: To find the difference between two amounts we need to subtract the lower number from the greater number.

- 4 A film is shown 3 times in a day.

The table shows how many children watch each showing.

Showing time	11 am	3 pm	7 pm
Number of children	381	184	67

How many more children watch the 11 am showing than the 7 pm showing?

Work out the column subtraction.

	H	T	O
	3	8	1
-		6	7

- 4 A film is shown 3 times in a day.

The table shows how many children watch each showing.

Showing time	11 am	3 pm	7 pm
Number of children	381	184	67

How many more children watch the 11 am showing than the 7 pm showing?

	H	T	O
	3	8 ⁷	¹ 1
-		6	7
	3	1	4

5 b) Complete the column subtraction.

		H	T	O	
		2	1	3	
	–		2	6	
		<hr/>			
		<hr/>			

5

b) Complete the column subtraction.

		H	T	O	
		2 ¹	1 ¹⁰	3 ¹	
	–		2	6	
		1	8	7	

Did you notice we need to exchange both tens and hundreds?

When we exchanged a ten for 10 ones, there were no tens left so we needed to exchange a hundred for 10 tens.

6 What mistakes have been made in these column subtractions?

a)

$$\begin{array}{r} 246 \\ - 18 \\ \hline 232 \end{array}$$

b)

$$\begin{array}{r} \cancel{5}^4 1^1 1^1 \\ - 24 \\ \hline 497 \end{array}$$

6

What mistakes have been made in these column subtractions?

a)

$$\begin{array}{r} 246 \\ - 18 \\ \hline 232 \end{array}$$

It should be $6 - 8$ so there

should be an exchange.

They have done $8 - 6 = 2$

by mistake.

b)

$$\begin{array}{r} 511 \\ - 24 \\ \hline 497 \end{array}$$

When they exchanged the

ten for 10 ones, they forgot

to make the 1 into 0.



8 Work out the missing digits.

a)

		H	T	O	
			3	4	
	—		1		
		5		5	



8

Work out the missing digits.

a)

		H	T	O	
			3 ²	4 ¹	
	-		1		
		5		5	

Starting with the ones.

Four subtract what number equals 5?

$$4 - ? = 5$$

We can't do it so we need to exchange a ten for 10 ones.



8 Work out the missing digits.

a)

		H	T	O	
			3 ²	14 ¹	
	-		1		
		5		5	

Subtract $14 - ? = 5$
What number goes in this box?



8

Work out the missing digits.

a)

		H	T	O	
			3 ²	14 ¹	
	-		1	9	
		5		5	

Subtract $14 - 9 = 5$
Did you get 9?

What will go in this box?



8 Work out the missing digits.

a)

		H	T	O	
			3 ²	4 ¹	
	-		1	9	
		5	1	5	

Did you get 1?

What will go in this box?

What number subtract
zero equals 5?



8 Work out the missing digits.

a)

		H	T	O	
		5	3 ²	4 ¹	
	-		1	9	
		5	1	5	

Did you get 5?