

Add and subtract 1s

- 1 a) Jack has 6 cookies.



Annie gives him one more cookie.
How many cookies does he have now?

Jack has cookies now.

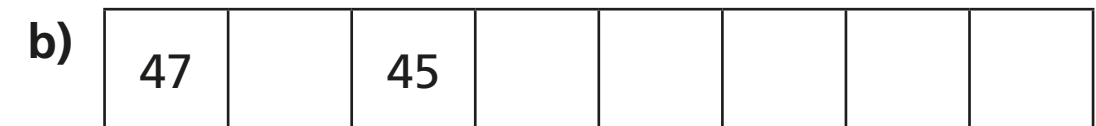
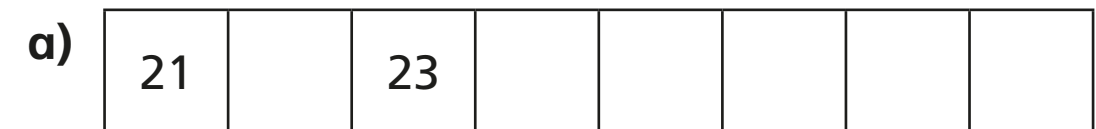
- b) Amir has 4 cookies.



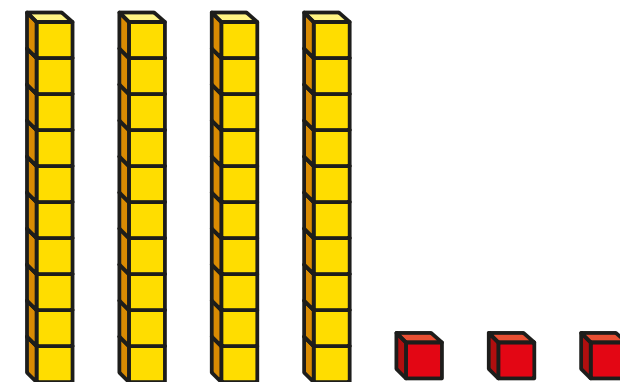
He eats one of his cookies.
How many cookies does he have now?

Amir has cookies now.

- 2 Complete the number tracks.



- 3 a) Filip has made a number using base 10



What number has Filip made?

- b) Rosie also makes a number using base 10
Rosie's number is one more than Filip's number.

What is Rosie's number?



c) Ron's number is 2 more than Filip's number.

What is Ron's number?

d) Dora's number is 1 less than Filip's number.

What is Dora's number?

4 Complete the calculations.

a) $14 + 1 =$

e) $19 - 1 =$

b) $22 + 1 =$

f) $33 +$

$= 34$

c) $54 + 1 =$

g) $18 = 19 -$

d) $= 1 + 61$

h) $= 89 - 1$

5 Complete the calculations.

a) $14 + 2 =$

e) $19 - 2 =$

b) $22 + 3 =$

f) $33 +$

$= 35$

c) $54 + 4 =$

g) $12 = 19 -$

d) $= 5 + 61$

h) $= 89 - 3$

6 Are the number sentences true or false?

a) $17 + 1 = 1 + 17$

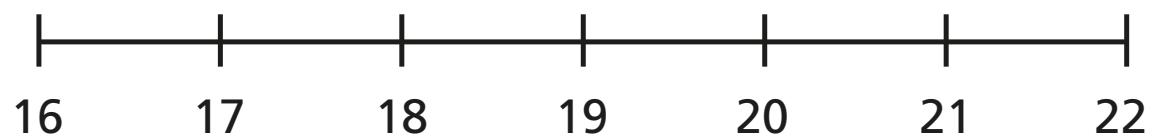
b) $17 - 1 = 1 - 17$

Talk about your answers with a partner.



Add a 2-digit and a 1-digit number – crossing ten

- 1 a)** Use the number line to complete the calculations.



$16 + 1 = \square$

$16 + 4 = \square$

$16 + 2 = \square$

$16 + 5 = \square$

$16 + 3 = \square$

$16 + 6 = \square$

- b)** Work out $16 + 7$

$16 + 7 = \square$

Talk to a partner about how you did it.



- 2** Use number bonds to complete the additions.
The first one has been done for you.

a)

$20 + 2 = 22$

b)

$10 + 3 = \square$

c)

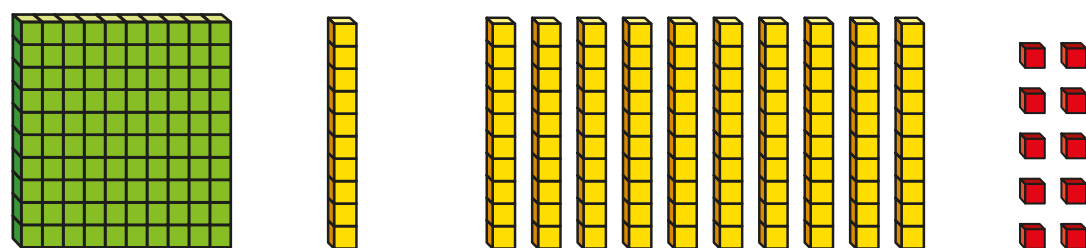
$\square + \square = \square$

3 Complete the additions.

a) $14 + 9 =$ <input type="text"/>	d) $7 + 15 =$ <input type="text"/>
b) $18 + 4 =$ <input type="text"/>	e) $4 + 19 =$ <input type="text"/>
c) $19 + 6 =$ <input type="text"/>	f) $18 + 3 =$ <input type="text"/>

4 Which two representations show 10?

Tick your answers.

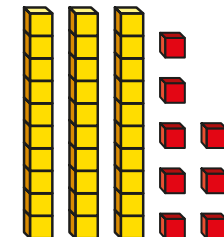




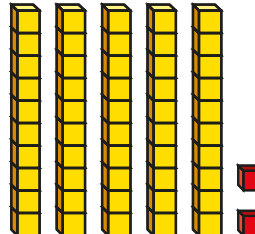
What is the same about the two representations?


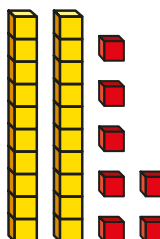
What is different?

5 Complete the additions.

a)  +  =

b)  +  =

c)  +  =

d)  +  =

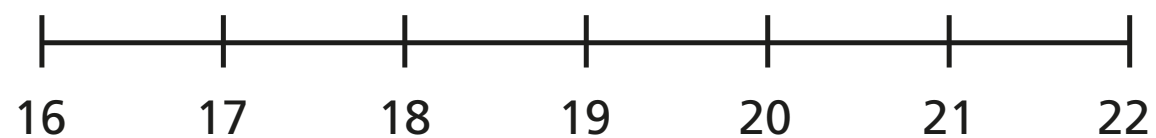
6 Complete the number sentences.

a) $25 + 6 =$ <input type="text"/>	e) $74 + 9 =$ <input type="text"/>
b) $38 + 4 =$ <input type="text"/>	f) $64 + 9 =$ <input type="text"/>
c) $9 + 52 =$ <input type="text"/>	g) $54 + 8 =$ <input type="text"/>
d) $3 + 27 =$ <input type="text"/>	h) $4 + 58 =$ <input type="text"/>



Subtract a 1-digit number from a 2-digit number – crossing 10

- 1 a)** Use the number line to complete the calculations.



$22 - 1 = \square$	$22 - 4 = \square$
$22 - 2 = \square$	$22 - 5 = \square$
$22 - 3 = \square$	$22 - 6 = \square$

- b)** Complete the subtraction.

$$22 - 7 = \square$$

How did you work it out?
Talk to a partner.



- 2** Use number bonds to complete the subtractions.
The first one has been done for you.

a) $13 - 5 = \square$
 $10 - 2 = 8$

b) $12 - 9 = \square$
 $10 - 7 = \square$

c) $16 - 8 = \square$
 $\square - \square = \square$

3 Complete the subtractions.

a) $14 - 9 =$ <input type="text"/>	d) $15 - 7 =$ <input type="text"/>
b) $14 - 8 =$ <input type="text"/>	e) $15 - 9 =$ <input type="text"/>
c) $17 - 8 =$ <input type="text"/>	f) $12 - 3 =$ <input type="text"/>

4 What is the difference between the numbers?

a)  $=$

b)  $=$

c)  $=$

How did you find the difference?



5 Complete the subtractions.

a) $31 - 7 =$ <input type="text"/>	e) $74 - 9 =$ <input type="text"/>
b) $46 - 9 =$ <input type="text"/>	f) $64 - 9 =$ <input type="text"/>
c) $32 - 8 =$ <input type="text"/>	g) $54 - 8 =$ <input type="text"/>
d) $32 - 3 =$ <input type="text"/>	h) $41 - 3 =$ <input type="text"/>

6 Use the three digit cards to write a subtraction.

6	7	2
<input type="text"/>	<input type="text"/>	<input type="text"/>

$\quad - \quad$

How many different answers can you find?

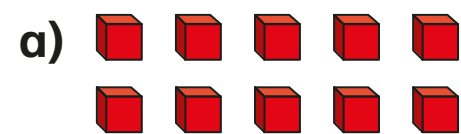
What is the greatest difference?

What is the smallest difference?

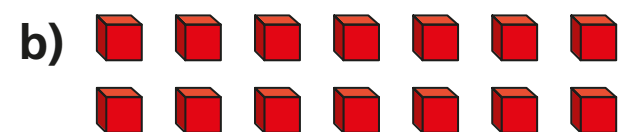


Add 2-digit numbers (2)

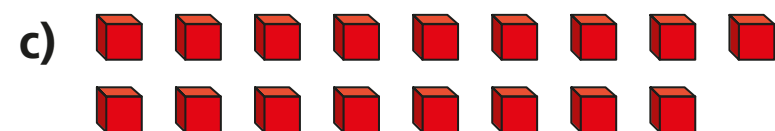
1 Count the ones and complete the sentences.



ones = ten



ones = ten and ones



ones = ten and ones

2

Tens	Ones
+	

Add the ones.

ones + ones = ones

ones = ten + ones

Add the tens.

tens + tens = tens

Complete the addition.

+ =

3 Use base 10 to complete the additions.

- a) $7 + 4 =$ f) $37 + 14 =$
- b) $10 + 30 =$ g) $22 + 19 =$
- c) $17 + 34 =$ h) $48 + 19 =$
- d) $19 + 21 =$ i) $33 + 29 =$
- e) $18 + 64 =$ j) $39 + 47 =$

Can you represent these additions on a number line?

4 Write the addition.

		T	O	
		4	6	
	+	1	5	
		6	1	
		1		

$$\square + \square = \square$$

What does the little 1 represent?
Talk to a partner.



5 Complete the additions.

a)

		T	O	
		5	7	
	+	1	5	

c)

		T	O	
		1	7	
	+	7	3	

b)

		T	O	
		1	8	
	+	1	9	

d)

		T	O	
		6	3	
	+	1	9	

6 Fill in the missing digits to complete the number sentence.

$$_9 + _3 = 62$$

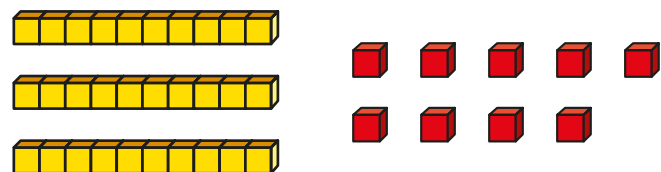
Compare answers with a partner.

How many different answers can you find?



Subtract 2-digit numbers (2)

1 a) What number is represented?

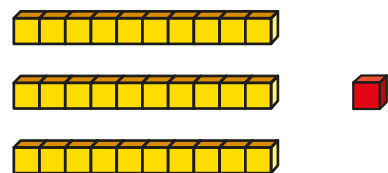


Subtract 12

What number is left?

$$\boxed{} - 12 = \boxed{}$$

b) What number is represented?



Subtract 12

What number is left?

$$\boxed{} - 12 = \boxed{}$$

What is the same about your answers?

What is different?



2 Use base 10 to complete the subtractions.

a) $23 - 6 = \boxed{}$

d) $45 - 26 = \boxed{}$

b) $33 - 7 = \boxed{}$

e) $63 - 35 = \boxed{}$

c) $33 - 17 = \boxed{}$

f) $82 - 24 = \boxed{}$

3 Tommy is working out $43 - 5$

		T	O	
		3	13	
	-		5	
		3	8	

Talk about Tommy's method with a partner.



4 Complete the subtractions.

a)

		T	O	
		2	3	
	-		6	
		<hr/>		
		<hr/>		

d)

		T	O	
		4	5	
	-	2	6	
		<hr/>		
		<hr/>		

b)

		T	O	
		3	3	
	-		7	
		<hr/>		
		<hr/>		

e)

		T	O	
		6	3	
	-	3	5	
		<hr/>		
		<hr/>		

c)

		T	O	
		3	3	
	-	1	7	
		<hr/>		
		<hr/>		

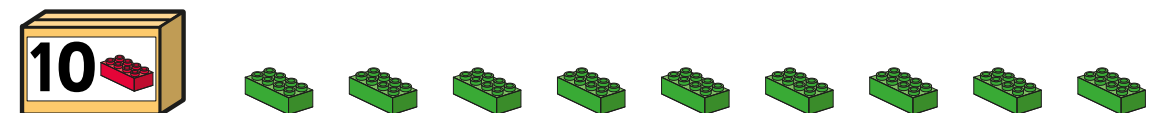
f)

		T	O	
		8	2	
	-	2	4	
		<hr/>		
		<hr/>		

5 Dexter has 33 bricks.



Rosie has 19 bricks.



a) How many bricks do Dexter and Rosie have altogether?

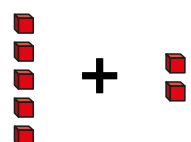
b) How many more bricks does Dexter have than Rosie?



Add and subtract multiples of 100

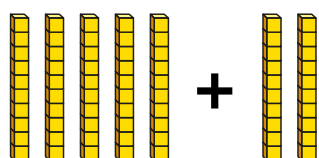
1 Complete the sentences.

a)



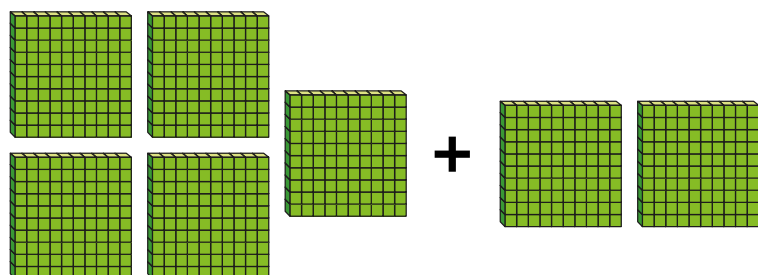
$$5 \text{ ones} + 2 \text{ ones} = \boxed{} \text{ ones}$$

b)



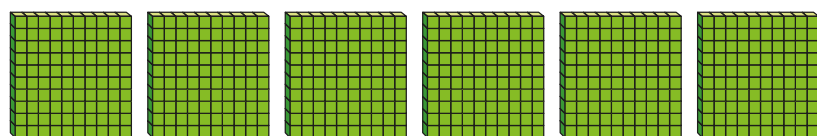
$$5 \text{ tens} + 2 \text{ tens} = \boxed{} \text{ tens}$$

c)



$$5 \text{ hundreds} + 2 \text{ hundreds} = \boxed{} \text{ hundreds}$$

2 Work out $600 - 400$



$$600 - 400 = \boxed{}$$

3 Complete the additions.

a) $3 + 1 = \boxed{}$

$$30 + 10 = \boxed{}$$

$$300 + 100 = \boxed{}$$

b) $400 + 200 = \boxed{}$

$$400 + 300 = \boxed{}$$

$$400 + 400 = \boxed{}$$

$$400 + 500 = \boxed{}$$

$$400 + 600 = \boxed{}$$

4 Complete the subtractions.

a) $9 - 2 = \boxed{}$

$$90 - 20 = \boxed{}$$

$$900 - 200 = \boxed{}$$

b) $600 - 400 = \boxed{}$

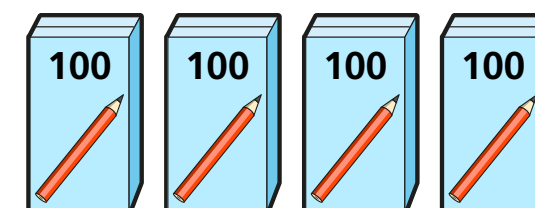
$$600 - 300 = \boxed{}$$

$$600 - 200 = \boxed{}$$

$$600 - 100 = \boxed{}$$

$$600 - 0 = \boxed{}$$

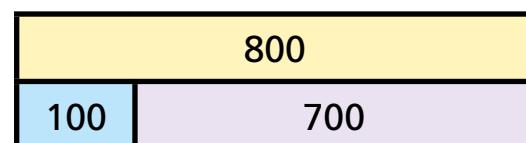
5 Kim has 400 pencils.



She buys 5 more boxes of pencils.

How many pencils does she have now?

- 6 Use the diagram to write 4 calculations.



$$100 + \boxed{} = \boxed{}$$

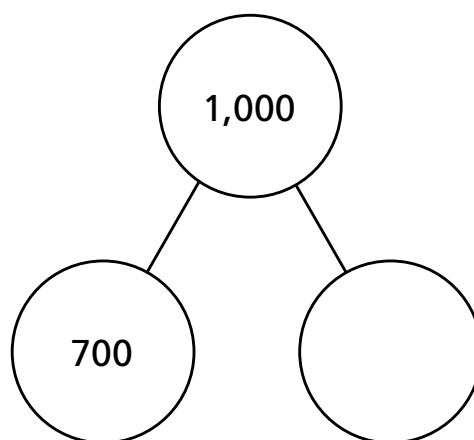
$$\boxed{} + \boxed{} = \boxed{}$$

$$\boxed{} - \boxed{} = \boxed{}$$

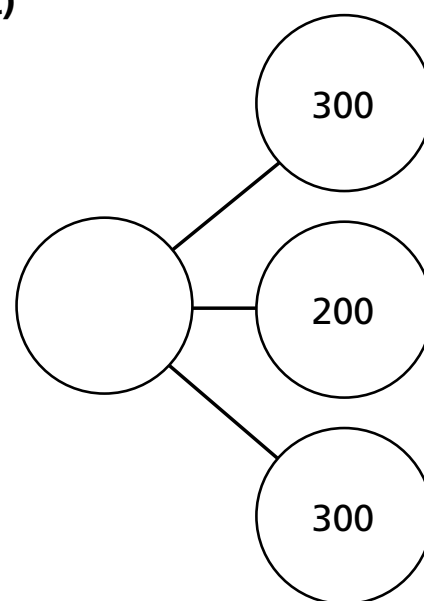
$$\boxed{} - \boxed{} = \boxed{}$$

- 7 Complete the part-whole models.

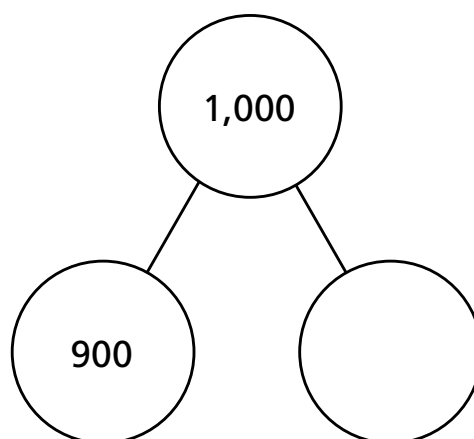
a)



c)



b)



- 8 Complete the number sentences.

a) $200 + 300 = \boxed{}$ f) $900 = \boxed{} + 300$

b) $800 - 100 = \boxed{}$ g) $200 + 200 + 300 = \boxed{}$

c) $300 + \boxed{} = 700$ h) $600 = 100 + 200 + \boxed{}$

d) $500 + \boxed{} = 700$ i) $700 - 200 + 300 = \boxed{}$

e) $\boxed{} - 200 = 300$ j) $500 - \boxed{} = 0$

- 9 There are 400 girls in a school.

There are 100 more boys than girls.

How many boys and girls are there in the school in total?

- 10 The answer is 700

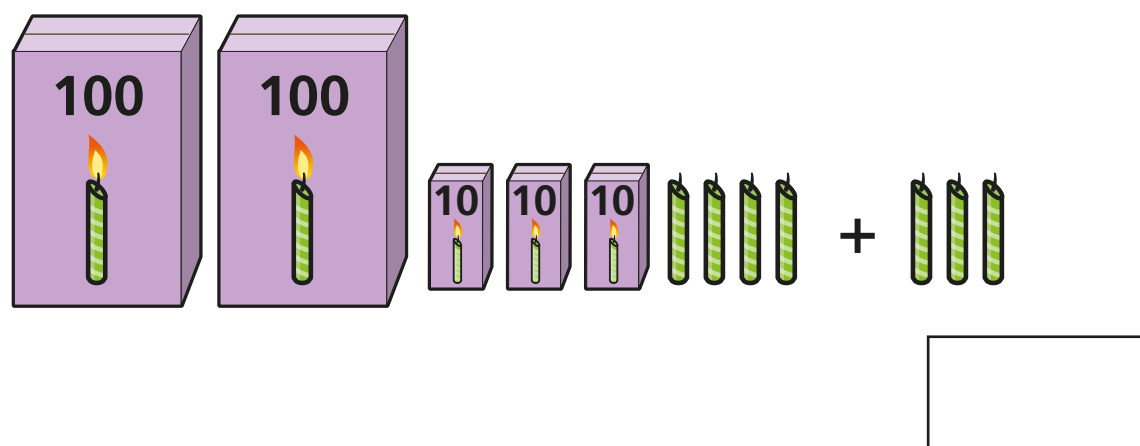
How many questions can you think of that add hundreds or subtract hundreds to make 700?

How do you know you have found them all?

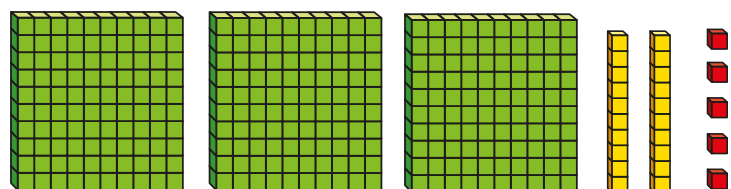
Add and subtract 3-digit and 1-digit numbers – not crossing 10



1 How many candles are there in total?



2 Amir has made the number 325



Amir subtracts 3 ones from his number.

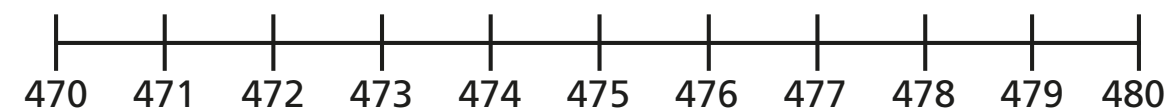
a) Write a calculation to show what Amir has done.

 -

b) What is the answer to the calculation?

3 Complete the calculations.

Use the number line to help if you need to.



a) $475 + 1 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>	b) $475 - 1 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>
$475 + 2 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>	$475 - 2 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>
$475 + 3 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>	$475 - 3 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>
$475 + 4 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>	$475 - 4 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>
	$475 - 5 =$ <div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block;"></div>

4 Here is a number.

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

a) Add 4 ones to the number.

What is the answer?

b) Tom says if you subtract 2 ones from the number, you get 633

What mistake has Tom made?

5 Complete the calculations.

a) $276 + 3 =$

g) $= 625 + 3$

b) $276 - 4 =$

h) $= 488 - 7$

c) $311 - 1 =$

i) $724 +$ $= 728$

d) $311 + 5 =$

j) $394 -$ $= 393$

e) $3 + 405 =$

k) $+ 913 = 918$

f) $278 - 4 =$

l) $186 -$ $= 184$

6 Nijah collects stamps.

She has 526 stamps.

She collects 3 more.

How many stamps does she have now?



7 Put the digit cards in the correct place in each calculation.

Use all 4 cards each time.

1 3 6 9

$+$ $= 397$

$-$ $= 133$

$+$ $= 397$
 $-$ $= 166$

8 Work out the missing digits.

a) $7_4 + 4 = _8_$

b) $97_ + 3 = 9_3$

c) $_78 -$ $= 173$

9 Aisha wants to work out $764 + 3 + 2$

Show two ways she can do this.

10 Scott thinks of a number.

He adds 5 to his number.

His number ends with a 5

Was the number Scott started with odd or even?

Explain your answer.

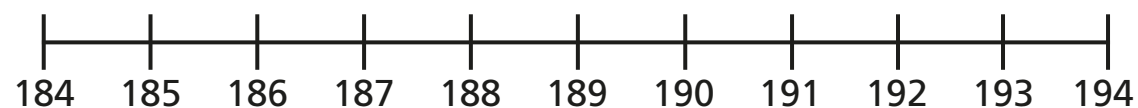
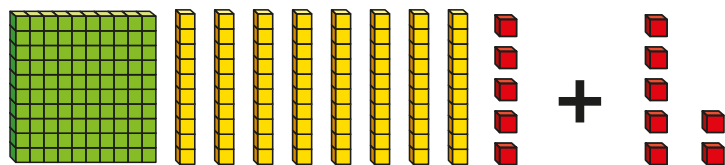
Compare answers with a partner.



Add 3-digit and 1-digit numbers – crossing 10



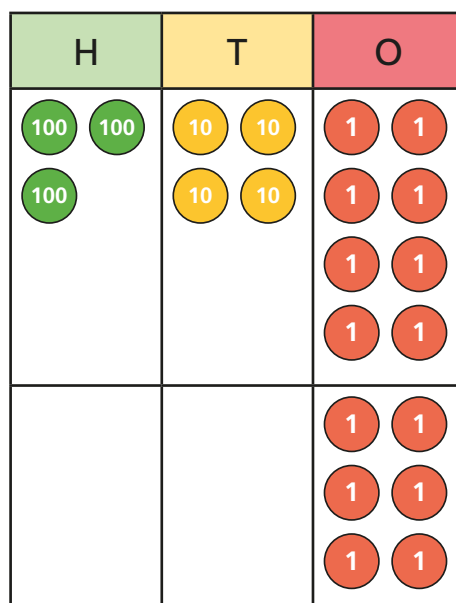
1 a) Work out $185 + 7$



$$185 + 7 = \boxed{}$$

How did you work this out?

b) Work out $348 + 6$

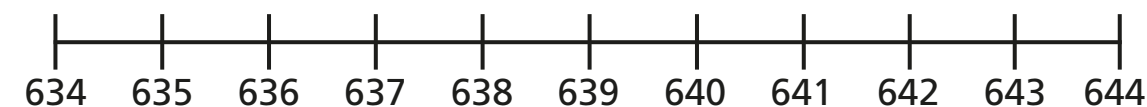


$$348 + 6 = \boxed{}$$

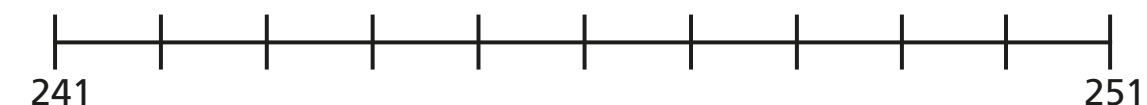
2 Work out these additions.

Use two jumps on the number lines.

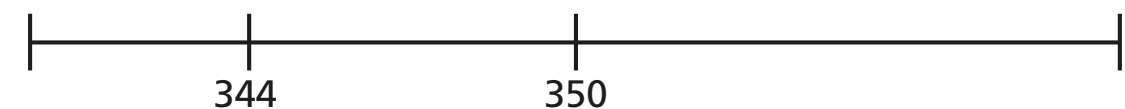
a) $635 + 8 = \boxed{}$



b) $242 + 9 = \boxed{}$



c) $344 + 7 = \boxed{}$



3 Work out the additions.

a) $295 + 6 = \boxed{}$

c) $8 + 424 = \boxed{}$

b) $662 + 8 = \boxed{}$

d) $\boxed{} = 825 + 9$

- 4 a) Circle the calculations with an answer that ends in a zero.

$426 + 6$

$422 + 5$

$427 + 3$

$429 + 1$

$420 + 8$

$423 + 7$

- b) Write the missing digits.

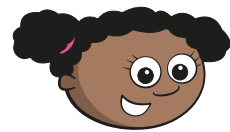
$376 + \square = 380$

$53_ + 5 = 540$

$219 + \square = 220$

$2 + 65_ = 660$

5



When you add a 3-digit and a 1-digit number together, only the ones digit in the 3-digit number will change.

Is Whitney correct? _____

Explain your answer.

- 6 Work out the missing digits.

a) $34_ + 7 = 352$

d) $9 + 17_ = 1_8$

b) $725 + \square = 731$

e) $34_ + 7 = 3_5$

c) $45_ + 3 = 462$

f) $__5 + 8 = 323$



- 7 Arrange the digit cards to make a sum where the answer is a multiple of 5



Find 4 different sums.

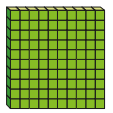
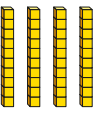

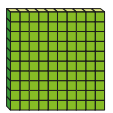
<input type="text"/>	<input type="text"/>	<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>

- 8 Mo has £232 in his bank account.
 Rosie has £237 in her bank account.
 Mo puts £9 into his bank account.
 Rosie puts some money into her account.
 Now they both have the same amount of money.
 How much did Rosie put into her account?



Subtract a 1-digit number from a 3-digit number – crossing 10

1

H	T	O
		
		

a) Work out $245 - 3$




Explain your method to a partner.

b) Work out $245 - 8$

Talk to your partner about the method you used.

Did you do anything different this time?

2

H	T	O
		

Work out $311 - 7$



3

Tick the calculations that include an exchange.

a) $273 - 2$ ☐ $273 - 5$ ☐ $273 - 8$ ☐

b) $395 - 8$ ☐ $395 - 1$ ☐ $395 - 5$ ☐

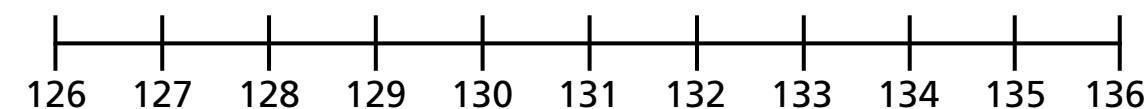
c) $412 - 7$ ☐ $412 - 6$ ☐ $412 - 3$ ☐

4

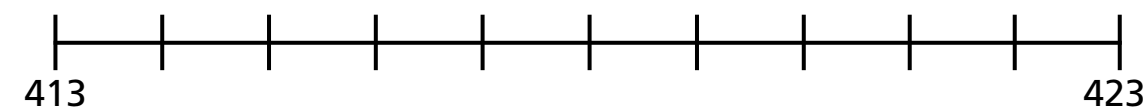
Complete the number sentences.

Use two jumps on the number lines.

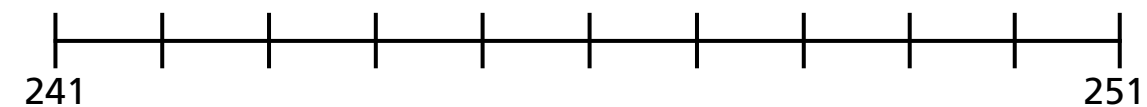
a) $135 - 8 =$



b) $422 - 7 =$



c) $251 - 9 =$



- 5 A baker bakes 223 loaves of bread.
He eats 6 loaves of bread.
How many loaves of bread does he have left?

- 6 Complete the number sentences.

a) $315 - 7 =$

d) $= 671 - 3$

b) $662 - 9 =$

e) $829 - 7 =$

c) $= 471 - 3$

f) $827 - 9 =$

- 7 Complete the calculations.

a) $524 -$ $= 521$

b) $18_ - 5 = 183$

$524 -$ $= 519$

$18_ - 5 = 178$

$524 -$ $= 517$

$18_ - 5 = 175$

- 8 The answer is 507
a) Whose subtraction is correct?



- b) What mistake has the other child made?

- 9 How many different ways can you complete this calculation?

$36_ -$ $= 357$

- 10 Complete the number sentences.

a) $623 - 7 = 613 +$

c) $515 -$ $= 501 + 7$

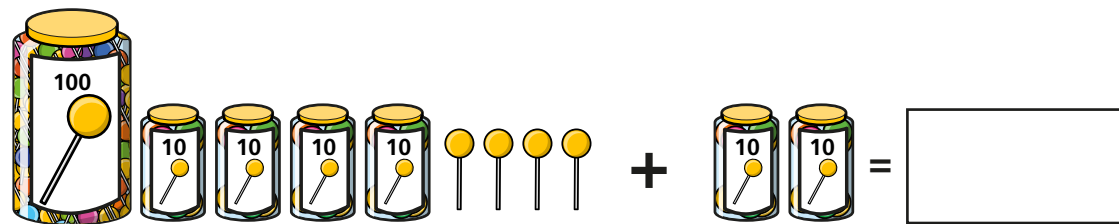
b) $125 + 2 = 130 -$

d) $300 - 8 =$ $+ 2$



Add and subtract 3-digit and 2-digit numbers – not crossing 100

1 How many lollipops are there in total?



2 Eva has made this number.

Hundreds	Tens	Ones

a) What number has Eva made?

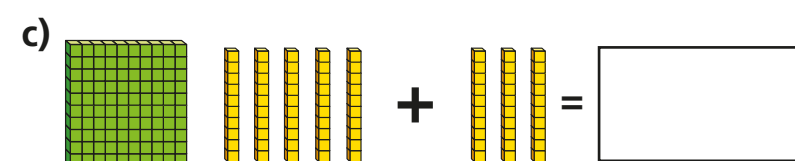
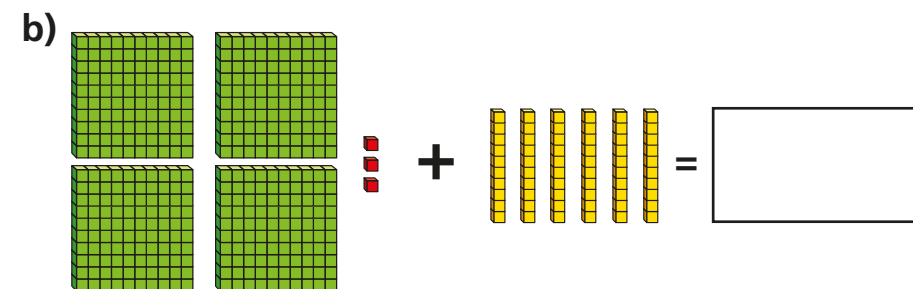
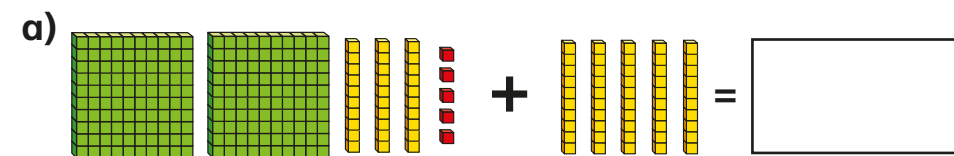
b) Eva subtracts 40 from her number.

Write a subtraction to show what Eva has done.

 -

c) What is the answer to the subtraction?

3 Complete the additions.



4 Use base 10 to help you complete the number sentences.

a) $146 + 30 =$

b) $146 - 30 =$

c) $146 + 50 - 50 =$

5 Use the place value chart to help you complete the number sentences.

H	T	O

a) $742 + 30 =$

b) $742 - 30 =$

c) $742 + 50 =$

d) $742 - 20 =$

e) $20 + 742 =$

f) $= 742 - 40$

6 Complete the calculations.

a) $717 + 30 =$

$717 + 60 =$

$717 + 40 =$

$80 + 717 =$

What do you notice?

b) $182 - 30 =$

$282 - 30 =$

$587 - 30 =$

$380 - 30 =$

What do you notice?

7 Here is a subtraction.

$487 - 50 = 482$

What mistake has been made?

8 Complete the number sentences.

a) $196 - 30 =$

b) $241 + 40 =$

c) $511 - 10 =$

d) $725 + 50 =$

e) $60 + 927 =$

f) $- 40 = 255$

g) $= 827 + 20$

h) $487 -$ $= 417$

i) $392 -$ $= 302$

j) $+ 50 = 277$

k) $+ 913 = 953$

l) $429 -$ $= 429$

9 Here is a calculation with three missing digits.

$726 + _0 - _0 = 7_6$

All the missing digits are different.

What could the calculation be?

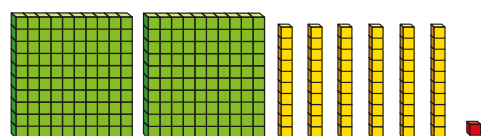
How many calculations can you find?



Add 3-digit and 2-digit numbers – crossing 100



1 Use base 10 to help you complete the additions.



a) $261 + 10 =$

c) $261 + 30 =$

b) $261 + 20 =$

d) $261 + 40 =$

What do you notice?

2 Complete the additions.

a) + =

b) + =

3 Complete the number sentence.

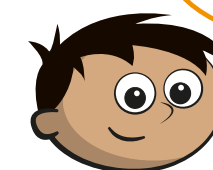
Use the place value chart to help you.

$369 + 70 =$

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

+

4



When you add 5 tens to a 3-digit number, only the tens column changes.

Write three examples to show Amir is wrong.

5 Complete the number sentences.

a) $452 + 70 =$

b) $692 + 60 =$

c) $357 + 70 =$

d) $84 + 70 =$

e) $30 + 784 =$

f) $= 712 + 90$

g) $171 + 50 + 20 =$

h) $256 + 50 + 30 =$

6 Complete the number sentences.

$349 +$ $= 429$

$359 +$ $= 429$

$339 +$ $= 429$

$+ 399 = 429$

7 Work out the missing digits.

a) $772 + _0 = 812$

$772 + _0 = 822$

$772 + _0 = 852$

b) $3_4 + 60 = 454$

$3_4 + 60 = 444$

$3_4 + 60 = 414$



8 a) What is the smallest possible missing digit?

$773 + _0 > 820$

b) What is the smallest possible missing digit?

$773 + _0 > 824$

c) What is the greatest possible missing digit?

$773 + _0 < 824$

9 A barrel contains 175 litres of water.



2 buckets of water are poured into the barrel.



There is now 265 litres of water in the barrel.

How much water could have been in each bucket?

How many different answers can you find?

Subtract a 2-digit number from a 3-digit number – crossing 100

1 Use base 10 to make the number 235

a) Complete the subtraction.

$$235 - 20 = \boxed{}$$

b) Complete the subtraction.

$$235 - 30 = \boxed{}$$

c) Show how you can work out $235 - 50$ using base 10

Talk to a partner about how you did it.

d) Complete the number sentences.

$$235 - 50 = \boxed{}$$

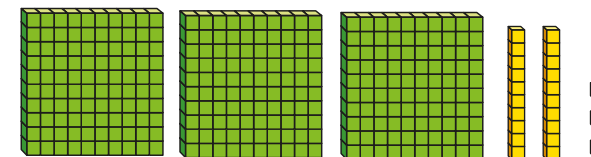
$$235 - 70 = \boxed{}$$

$$235 - 90 = \boxed{}$$



2 Complete the number sentences.

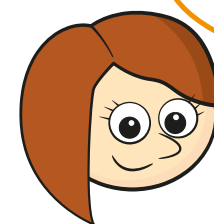
a) $323 - 60 = \boxed{}$



b) $712 - 40 = \boxed{}$

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

3



You can't subtract 70 from 624 as there aren't enough tens.

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

Rosie is wrong.

How do you know?





4 Complete the number sentences.

a) $720 - 60 =$

e) $716 - 50 =$

b) $338 - 40 =$

f) $= 528 - 90$

c) $248 - 60 =$

g) $319 - 20 =$

d) $937 - 50 =$

h) $703 - 80 =$

5 The answer to each of these subtractions is 358
Find the possible missing digits.

$4_8 - _0 = 358$

$4_8 - _0 = 358$

$4_8 - _0 = 358$

$4_8 - _0 = 358$

$4_8 - _0 = 358$

6 Nijah is working out $524 - 80$ in her head.
She says the answer is 464
What mistake do you think Nijah has made?
Talk to a partner.



7 Complete the calculations.

a) $758 -$ $= 708$

e) $163 = 253 -$

b) $612 -$ $= 532$

f) $- 80 = 341$

c) $129 -$ $= 69$

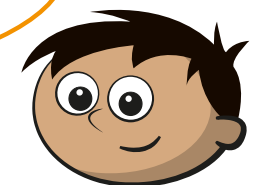
g) $- 70 = 603$

d) $807 -$ $= 777$

h) $- 40 - 30 = 448$

8 Amir is thinking of a number.

If I subtract 20
I don't have to make an exchange.
If I subtract 70 I have to make
1 exchange.


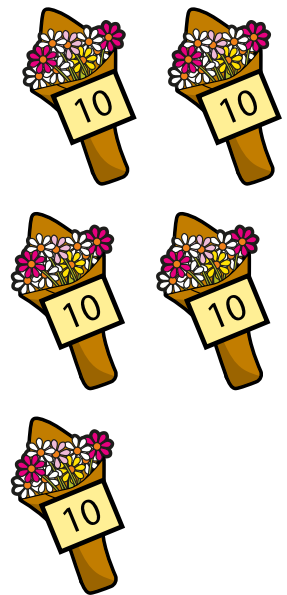



How many tens could Amir's number have?

Give reasons for your answer.

Add and subtract 100s

1 Brett has some flowers.

Hundreds	Tens	Ones
		

He buys 3 more bunches of these flowers.

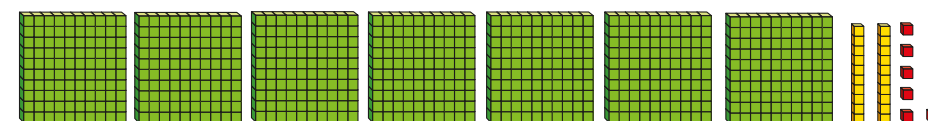
How many flowers does he have now?

Complete the number sentence.

$$\square \bigcirc \square = \square$$



2 Filip makes the number 726



Cross out the hundreds to help you complete the number sentences.

a) $726 - 100 = \square$

c) $726 - 400 = \square$

b) $726 - 200 = \square$

d) $726 - 700 = \square$

3 Complete the number sentences.

a) $400 + 300 = \square$

b) $700 - 200 = \square$

$430 + 300 = \square$

$780 - 200 = \square$

$439 + 300 = \square$

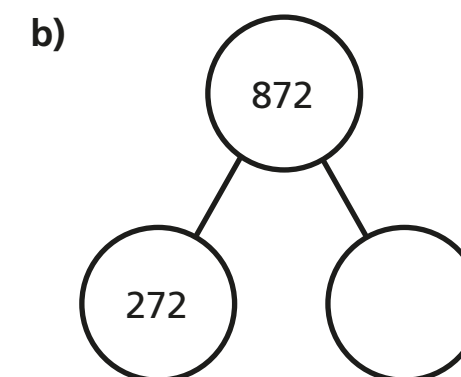
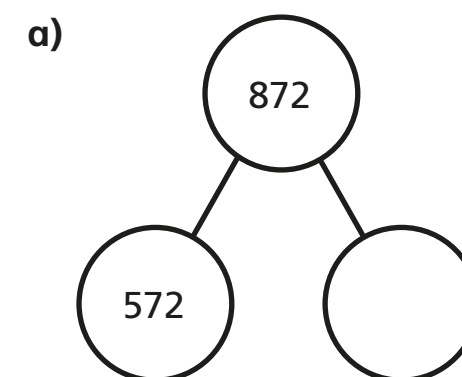
$783 - 200 = \square$

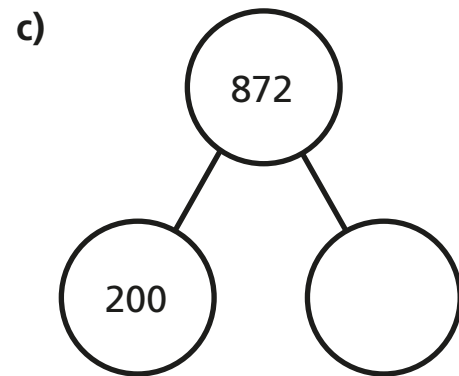
$300 + 477 = \square$

$701 - 200 = \square$

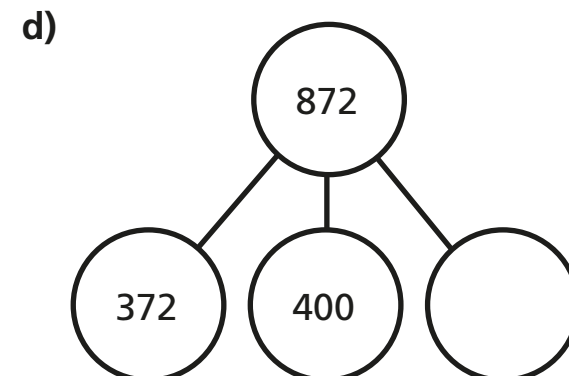
What patterns do you notice?

4 Complete the part-whole models.





What patterns do you notice?



5 Complete the number sentences.

a) $148 + \boxed{} = 648$

b) $397 - \boxed{} = 197$

c) $789 + \boxed{} = 989$

d) $\boxed{} + 517 = 917$

e) $\boxed{} - 200 = 408$

f) $\boxed{} - 900 = 24$

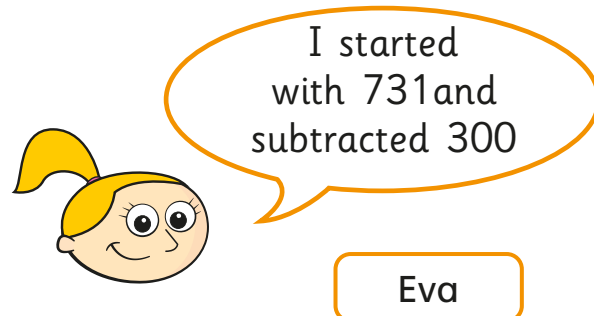
g) $\boxed{} + 400 = 849$

h) $728 = \boxed{} + 328$

i) $918 - \boxed{} = 818$

j) $\boxed{} + 200 = 299$

6 Eva and Tommy are working out calculations.



Eva and Tommy finish with the same number.

How many hundreds did Tommy add on?

7 Scott sells cakes.
He starts with 295 cakes.



a) On Monday, Scott bakes 400 more cakes and sells 100 cakes.

How many cakes does he have at the end of Monday?

b) On Tuesday he bakes 300 cakes.

At the end of Tuesday, he has 195 cakes left.

How many cakes does Scott sell?

8 Dora wants to buy a new computer.
She has saved £287
Each month she saves another £100



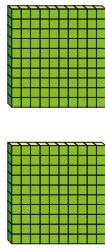
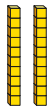

How many more months will it take
Dora to save enough to buy the computer?



Spot the pattern – making it explicit

1 Complete the number sentences.

Use the place value chart to help you.

H	T	O
		

a) $222 + 6 =$

b) $222 + 60 =$


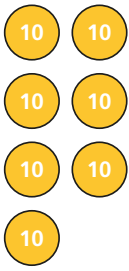
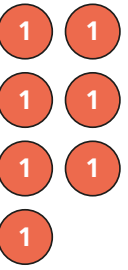
c) $222 + 600 =$

What do you notice?



2 Complete the number sentences.

Use the place value chart to help you.

H	T	O
		

a) $777 - 400 =$

c) $777 - 4 =$

b) $777 - 40 =$

What do you notice?



3 Complete the number sentences.

a) $315 + 200 =$

$315 + 20 =$

$315 + 2 =$

c) $405 + 30 =$

$405 + 50 =$

$405 + 90 =$

b) $748 - 200 =$

$748 - 20 =$


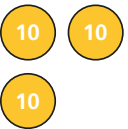

$748 - 2 =$

d) $635 - 300 =$

$635 - 500 =$

$635 - 600 =$

4 Amir makes this number on a place value chart.

H	T	O
		

a) Amir adds some counters to the chart.

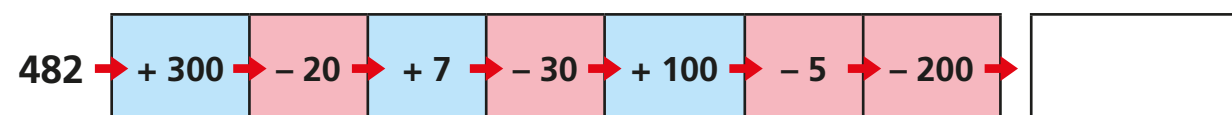
He now has the number 736

What counters did Amir add?

b) Amir removes 3 counters from one of the columns.

What numbers could he have now?

5 Work out the missing number.



6 Complete the sentences.

a) 500 more than 238 is equal to

b) 528 is more than 228

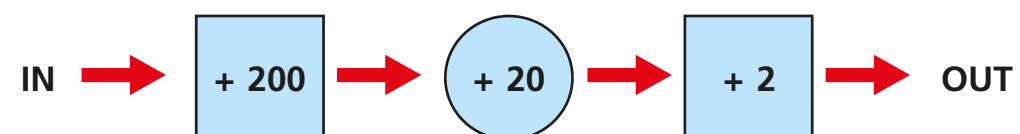
c) 727 is less than 729

d) 64 is less than 364

e) 429 is 20 more than

f) 429 is 20 less than

7 Here is a number machine.

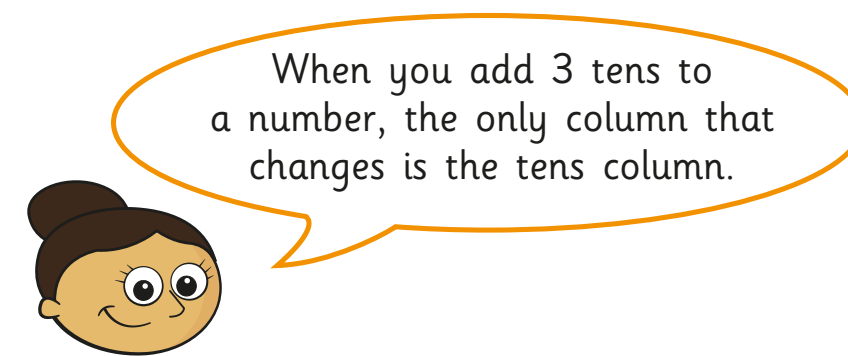


a) If 476 goes into the machine, what number comes out?

b) If 476 comes out of the machine, what number went in?

How did you work this out?

8



Is Dora correct? _____

Explain your answer.

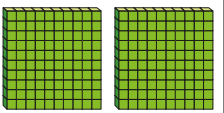
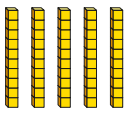




Add and subtract 2-digit and 3-digit numbers – not crossing 10 or 100



1 Work out the additions.

a)


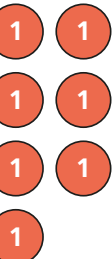


+

Hundreds	Tens	Ones
		
		

	H	T	O
	2	5	1
+		3	2
<hr/>			

b)

+

H	T	O
		
		

	H	T	O
	3	0	7
+		4	2
<hr/>			

c)

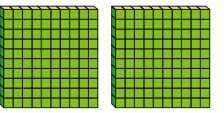
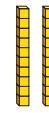

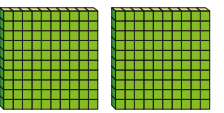
	H	T	O
	2	3	7
+		5	1
<hr/>			

d)

	H	T	O
	7	5	2
+		3	7
<hr/>			


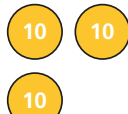
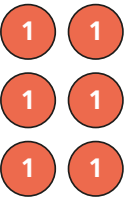



2 Work out these subtractions.

a)

H	T	O
		
		

	H	T	O
	4	2	7
-		1	5
<hr/>			

b)

H	T	O
		
		

	H	T	O
	5	3	6
-		3	5
<hr/>			

c)

	H	T	O
	7	8	5
-		5	2
<hr/>			

d)

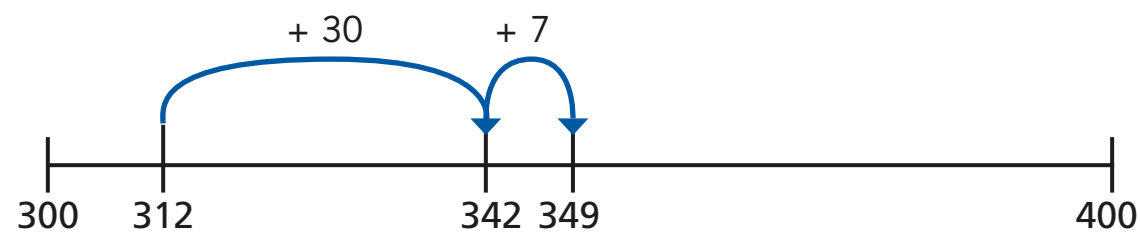
	H	T	O
	9	8	5
-		7	2
<hr/>			

3 Complete the additions.

a) £69 + £220 = £

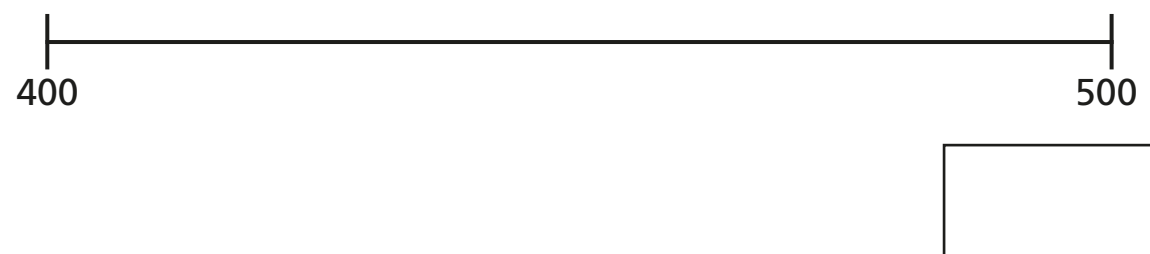
b) 314 + 42 + 23 =

- 4 a) Eva uses a number line to work out $312 + 37$

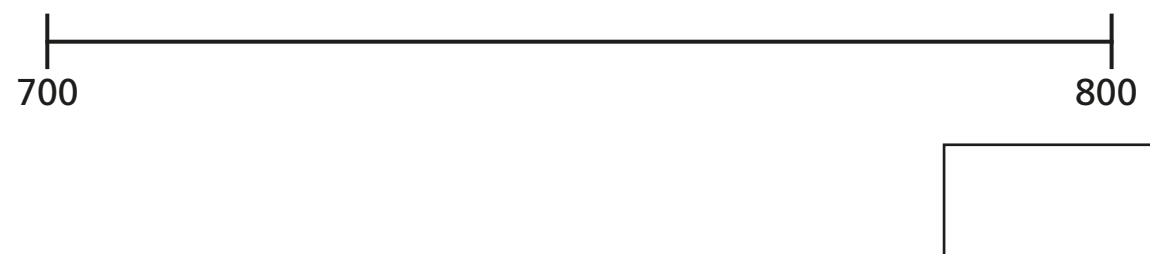


What has Eva done? Talk to a partner.

- b) Use the number line to work out $425 + 63$



- c) Use the number line to work out $774 - 62$



- 5 Esther has a piece of wood 255 cm long.

She cuts it into 2 pieces.



One piece is 34 cm long.

How long is the other piece?

- 6 Filip wants to buy these two items.

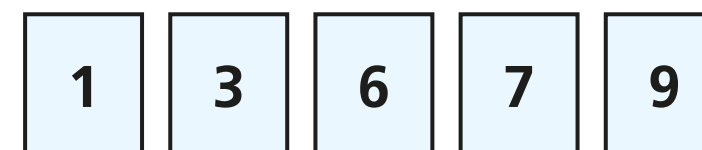


He has £200

Does he have enough money? _____

How do you know? Talk to a partner.

- 7 Use the digit cards to make each calculation correct.



		H	T	O	
	+				
		9	9	8	

		H	T	O	
	+				
		9	8	9	

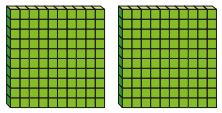
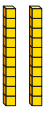

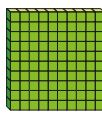
		H	T	O	
	-				
		1	6	1	

		H	T	O	
	-				
		6	2	2	

Add 2-digit and 3-digit numbers – crossing 10 or 100

1 Use the place value chart to work out $328 + 36$

+


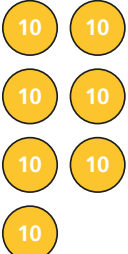

H	T	O
		
		

	H	T	O
	3	2	8
+		3	6
	<hr/>		

2 Work out the additions.

a) $572 + 45$


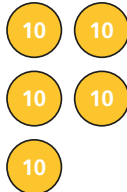

+

H	T	O
		

	H	T	O
	5	7	2
+		4	5
	<hr/>		

b) $754 + 66$

+

H	T	O
		

	H	T	O
	7	5	4
+		6	6
	<hr/>		

3 Work out the additions.

a)

	H	T	O
	1	7	5
+		7	2
	<hr/>		

d) $845 + 72$

	H	T	O

b)

	H	T	O
	3	0	7
+		8	4
	<hr/>		

e) $436 + 85$

	H	T	O

c) $35 \text{ kg} + 239 \text{ kg}$

	H	T	O

f) $£739 + £68$

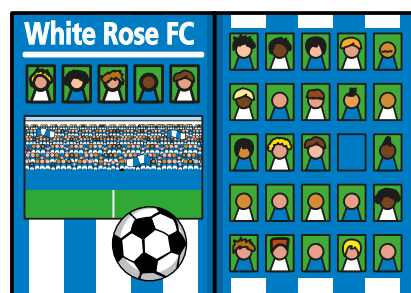
	H	T	O

- 4 Ron works out $476 + 35$
What mistake has Ron made?
Work out the correct answer.

$$\begin{array}{r} 476 \\ + 35 \\ \hline 826 \\ 1 \end{array}$$



- 5 Alex collects stickers.
She has collected 286 stickers.
She only needs 69 more stickers to
fill the album.



How many stickers does the album hold when full?



- 6 Here are some digit cards.

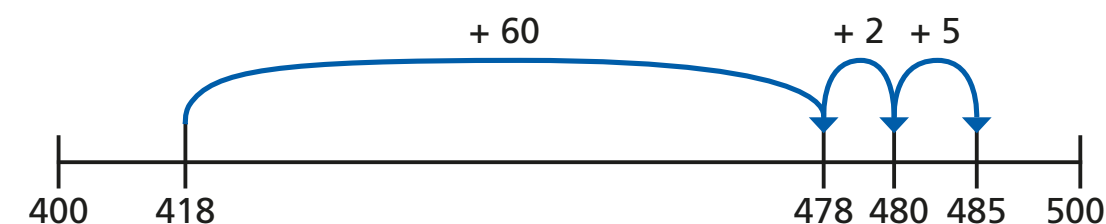
2	3	5	7	8
---	---	---	---	---

Arrange the digits to make two different additions that have just one exchange.

		H	T	O	
	+				

		H	T	O	
	+				

- 7 Mo uses a number line to work out an addition.

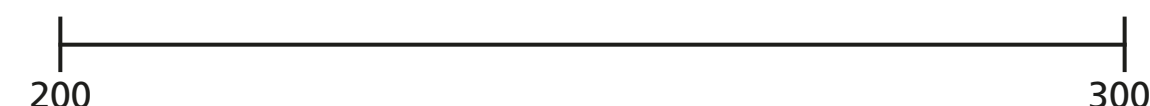


What addition has Mo worked out?

 + =

- 8 Use the number lines to complete the additions.

a) $235 + 47 =$



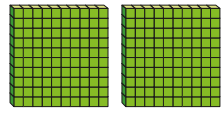
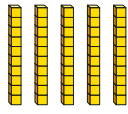

b) $235 + 87 =$



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

1 Use base 10 to make the number 253

Subtract 27 from 253

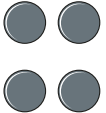
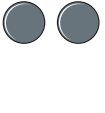
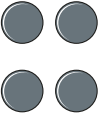
Hundreds	Tens	Ones
		

a) Show a partner the method you used.

b) Complete the column subtraction.

	H	T	O
	2	5	3
–		2	7

2 Work out $426 - 82$

H	T	O
		

	H	T	O
	4	2	6
–		8	2

3 Work out the subtractions.

a)

	H	T	O
	2	6	5
–		3	8

d) $212 \text{ cm} - 42 \text{ cm}$

b)

	H	T	O
	1	7	2
–		3	9

e) $413 - 65$

c) $538 - 75$

f) $847 - 79$

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	462	295	78

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

5 Find the missing values.

a)

728	
45	

b)

650		
38	53	

6 What mistakes have been made in these column subtractions?

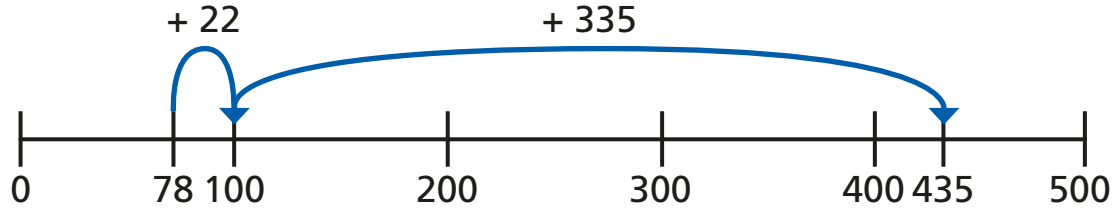
a)

3	5	7
–	2	9
<hr/>		
3	3	2

b)

4	5	1	1
6	0	2	
–	3	5	
<hr/>			
4	7	7	

7 Whitney uses a number line to show that $435 - 78 = 357$



Explain what you think Whitney has done.

8 Work out the missing digits.

a)

		H	T	O	
			4	5	
	–		2		
		7		6	

b)

		H	T	O	
		3			
	–		7	8	
			2	8	

9 a) Use three different methods to work out $470 - 79$

Compare methods with a partner.

b) How can you work out $500 - 68$ in your head?

What method did you use?

Add two 3-digit numbers – not crossing 10 or 100

1 Complete the column addition.

Use base 10 to help you.

Hundreds	Tens	Ones

	H	T	O
	4	5	3
+	1	2	5



2 Kim uses counters and a place value chart to help her work out $362 + 205$

Hundreds	Tens	Ones

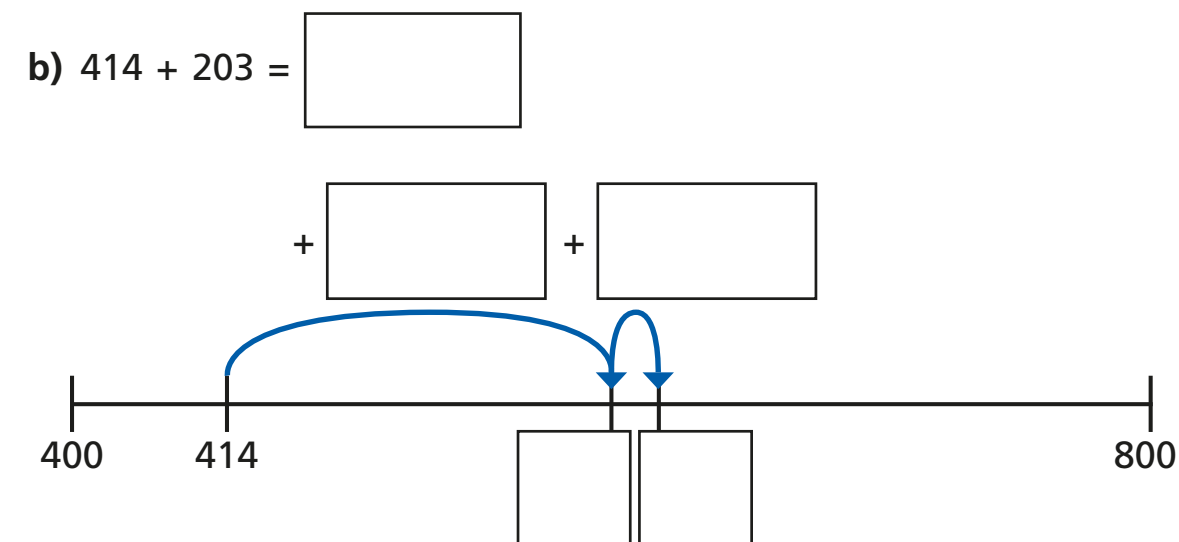
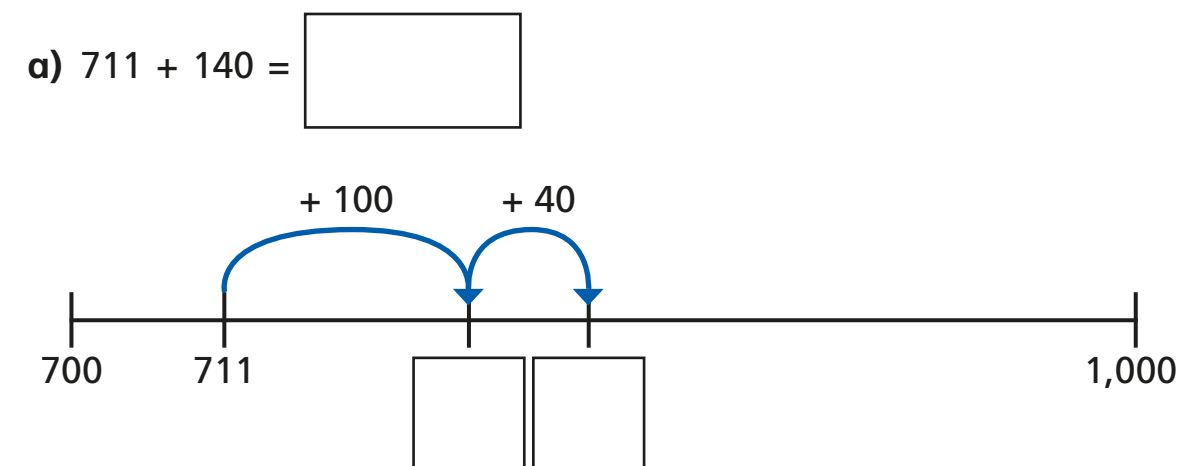
	H	T	O
	3	6	2
+	2	0	5

- Draw counters to complete the chart.
- Complete the column addition.
- Which column did you add first? Talk to a partner about your method.



3 Mrs Morgan drives 230 km on Monday.
On Tuesday she drives 169 km.
How far does she drive in total on Monday and Tuesday?

4 Complete the number line to work out the addition.



c) $502 + 384 =$



5 Complete the additions.

a) $736 + 203 =$

c) $£391 + £505 =$

b) $184 + 105 =$

6 The table shows the number of boys and girls in two schools.

	Boys	Girls
School A	224	305
School B	400	

a) The total number of children in each school is equal.

Without working it out, which school has more girls?

How do you know?

b) How many girls are there in school B?

7 Three children each work out an addition problem.

- Each child uses the same six digits.
- Each addition gives the same answer of 888
- Each child adds two different numbers together.

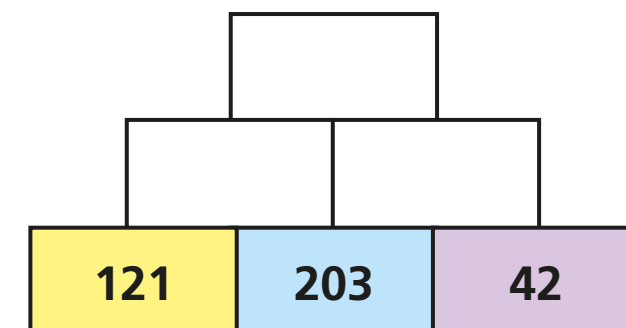
Work out a possible set of addition problems.

		H	T	O				H	T	O				H	T	O	
	+						+						+				
		8	8	8				8	8	8				8	8	8	

8 Here is an addition pyramid.

Add the two numbers below to make the number above.

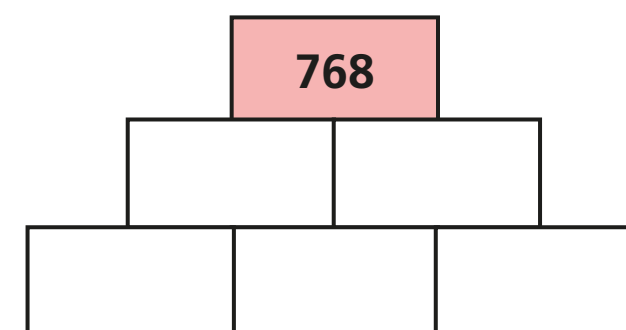
a) Complete the addition pyramid.



b) Complete the addition pyramid.

None of the additions should have an exchange.

The total is 768

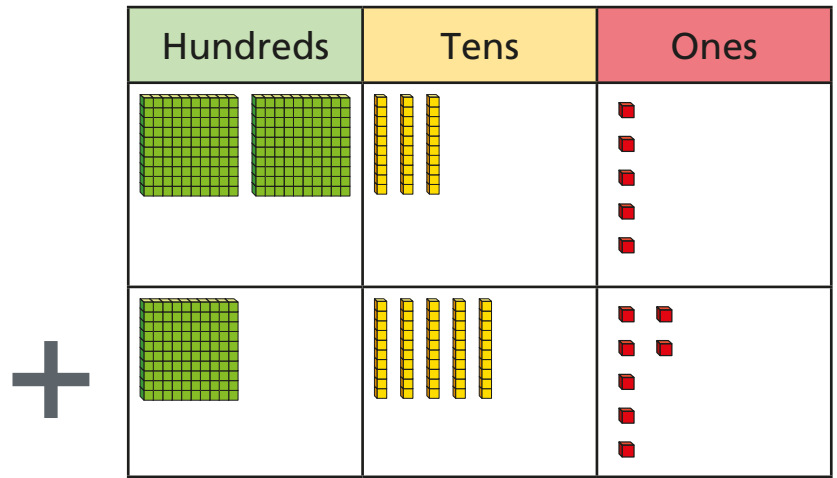


Compare answers with a partner.

Add two 3-digit numbers – crossing 10 or 100

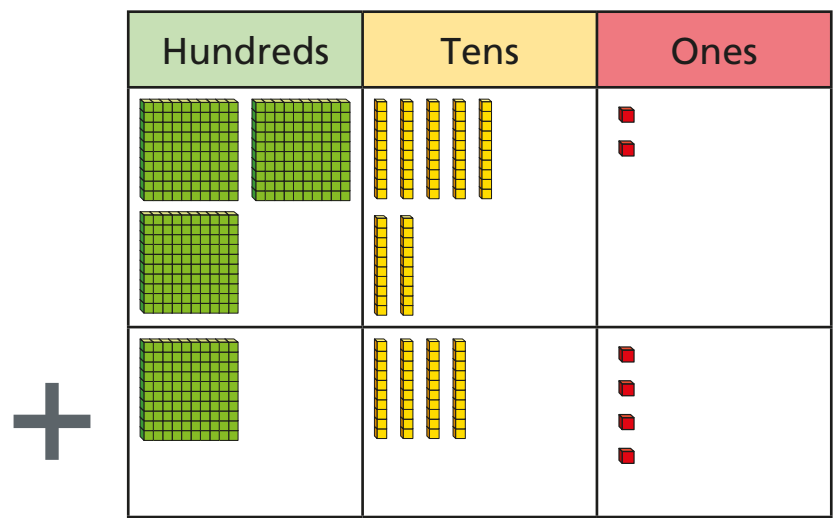
1 Complete the column addition.

a) $235 + 157$



	H	T	O
	2	3	5
+	1	5	7

b) $372 + 144$



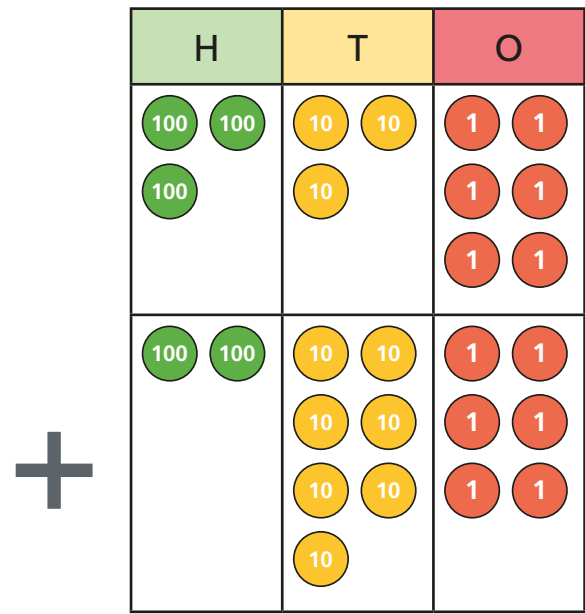
	H	T	O
	3	7	2
+	1	4	4

2 Tick the additions that need an exchange of ones for a ten.

		H	T	O			H	T	O			H	T	O	
		2	3	8			4	2	7			3	0	8	
	+	1	4	1		+	2	6	8		+	1	5	1	

How do you know if an addition needs to exchange 10 ones for a ten?

3 Dani uses counters to represent an addition.



a) What addition is Dani trying to work out?

b) Work out the answer to the addition.

c) How many exchanges did you have to do?

4 Work out the additions.

a)

		H	T	O	
		1	8	7	
	+	4	7	1	

b)

		H	T	O		
		5	1	7	m	
	+	2	3	4	m	

c) $718 + 108$

d) $526 + 294$

5 a) Tick the additions with an answer that ends in zero.

$317 + 203$ <input type="checkbox"/>	$192 + 784$ <input type="checkbox"/>	$390 + 177$ <input type="checkbox"/>
$455 + 165$ <input type="checkbox"/>	$386 + 184$ <input type="checkbox"/>	$319 + 501$ <input type="checkbox"/>

b) Did you have to work out all of the additions?

c) Complete the sentences.

The answer to $175 + 212$ ends with a

The answer to $609 + 175$ ends with a

The answer to $334 + 178$ ends with a

The answer to $716 +$ ends with a 3

6 Fill in the missing digits.

a)

		H	T	O	
		3		2	
	+	4	5		
			3	7	

b)

		H	T	O	
		1	0	9	
	+		2		
		5		5	

c)

		H	T	O	
		2	7	8	
	+	2	5		
				0	

d)

		Th	H	T	O	
			5	7	3	
	+					
		1	0	0	0	

7 Dexter bakes 148 biscuits on Monday.

On Tuesday he bakes 273 more biscuits than he did on Monday.

a) How many biscuits does Dexter bake on Tuesday?

b) How many biscuits does he bake in total on Monday and Tuesday?

8 Write two addition calculations that have:

- 1 exchange
- 2 exchanges.

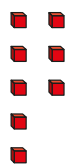
Compare answers with a partner.



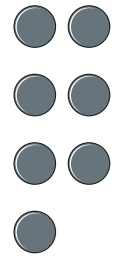

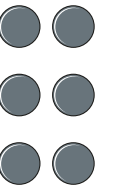
Subtract 3-digit numbers from 3-digit numbers – no exchange

1 Complete the column subtractions.

a) $358 - 226$

Hundreds	Tens	Ones			H	T	O		
					3	5	8		
					–	2	2	6	

b) $726 - 303$

H	T	O			H	T	O		
					7	2	6		
					–	3	0	3	

2 Complete the subtractions.

a)

		H	T	O	
		6	7	2	
	–	4	7	1	

b)

		H	T	O	
		5	6	3	
	–	1	5	1	

3 Ron is working out $785 - 257$

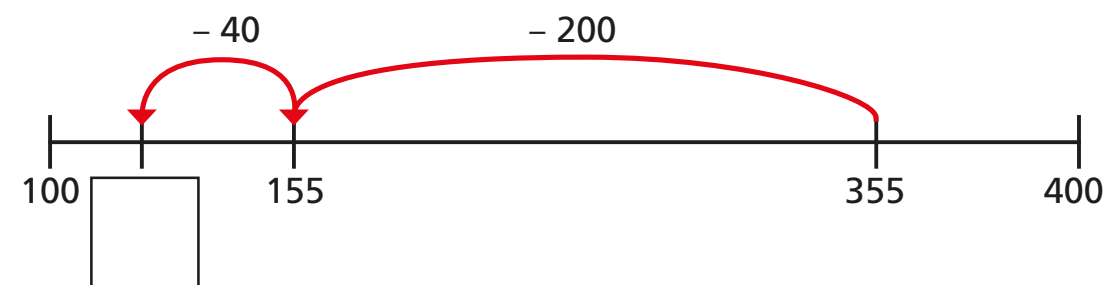
		H	T	O	
		2	5	7	
	–	7	8	5	

Do you agree with the way Ron has set out the subtraction?

Why?

4 Use the number line to work out the subtraction.

a) $355 - 240 =$



b) $835 - 501 =$



- 5 A TV costs £120 less than this computer.
How much does the TV cost?



- 6 There are 849 people at a concert.
There are 625 adults at the concert.

a) How many children are at the concert?

b) How many more adults than children are at the concert?

- 7 What are the values of each of the shapes?

a)

	6	★	8
—	★	▲	▲
	●	1	5

★ = ▲ =
● =

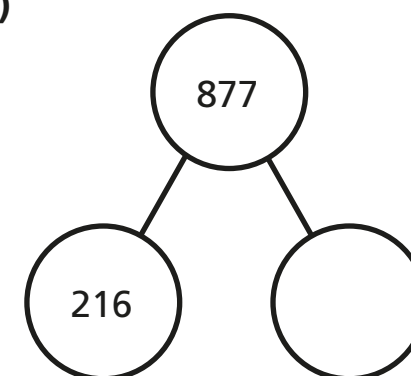
b)

	9	+	◆
—	+	4	⬠
	◆	⬠	◆

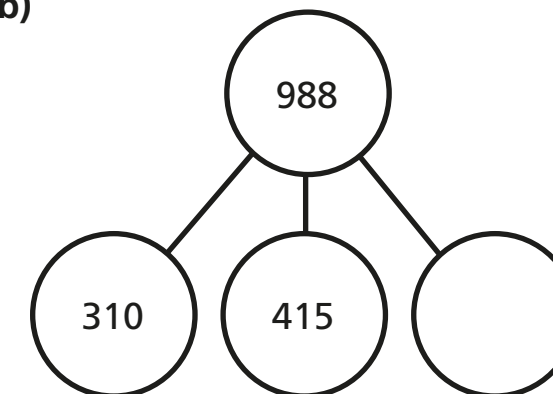
+ = ⬠ =
◆ =

- 8 Complete the part-whole models.

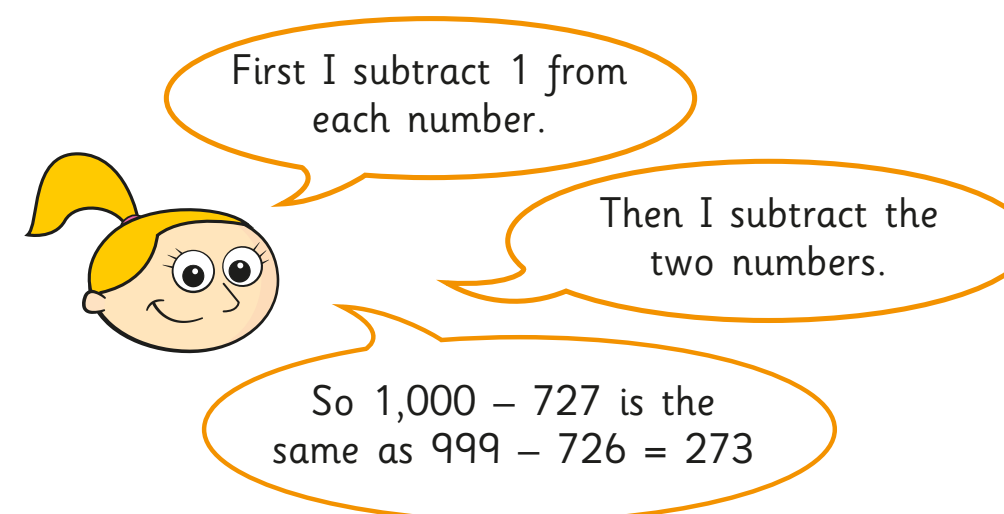
a)



b)



- 9 Eva is subtracting 727 from 1,000



Why does Eva's method work?

Talk about it with a partner.

Use Eva's method to complete the subtractions.

$1,000 - 285 =$

$800 - 636 =$

