

# Written methods – 3 digit addition with regrouping

e: 730

	H	T	O
	<sup>1</sup> 5	<sup>1</sup> 3	4
+	1	9	7
	7	3	1

This is the written method for addition when regrouping.

First, estimate the answer to the nearest ten:

$$530 + 200 = 730$$

Add the ones:  $4 + 7 = 11$  ones.

Think of this as 1 ten and 1 one.

Write the 1 in the ones column and put the 1 in the tens column.

Add the tens:  $3 + 9 + 1 = 13$  tens.

Write 3 in the tens column and 1 in the hundreds column.

Add the hundreds:  $5 + 1 + 1 = 7$  hundreds.

Is our answer reasonable? Yes, because it's close to our estimate.

- 1 Practise estimating answers by rounding to the nearest ten. The first one has been done for you.

	Question	Estimate
a	$682 + 179$	$680 + 180 = 860$
c	$359 + 222$	
e	$587 + 398$	
g	$189 + 108$	

	Question	Estimate
b	$271 + 119$	
d	$378 + 119$	
f	$412 + 98$	
h	$911 + 207$	

- 2 Add these 3 digit numbers using the written method. First, estimate to the nearest ten.

e:  

	H	T	O
a	3	5	4
+	2	1	7

e:  

	H	T	O
b	6	2	8
+	2	1	3

e:  

	H	T	O
c	3	6	4
+	2	2	8

Continued on page 29.

# Written methods – 3 digit addition with regrouping

Continued from page 28.

2 Add these 3 digit numbers using the written method:

d

e:			
	H	T	O
	2	6	3
+	1	3	9

e

e:			
	H	T	O
	3	4	4
+	4	5	9

f

e:				
	Th	H	T	O
		2	5	2
+		2	4	9

g

e:				
	Th	H	T	O
		2	6	2
+		5	4	9

h

e:				
	Th	H	T	O
		6	2	9
+		2	8	9

i

e:				
	Th	H	T	O
		3	4	9
+		3	8	7

3 Solve these word problems using the written method:

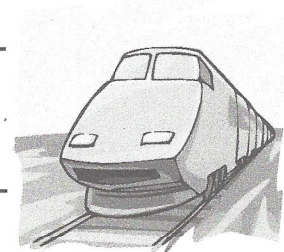
- a At the office supply store, 456 blue pens were sold on Saturday and 458 red pens were sold on Sunday. How many pens were sold that weekend?

H				T	O
+					



- b A train left the station with 389 people on board and then another 678 people got on over the next three stops. How many passengers were on the train altogether?

	Th	H	T	O
+				



# Written methods – 3 digit subtraction with regrouping

- 1 Subtract these 3 digit numbers using the written method. Start by writing your estimate. Estimate to the nearest 10.

e:

	H	T	O
a	6	5	2
-	3	2	7
<hr/>			
<hr/>			

e:

	H	T	O
b	7	6	1
-	2	2	9
<hr/>			
<hr/>			

e:

	H	T	O
c	5	9	2
-	4	4	8
<hr/>			
<hr/>			

You can use a piece of scrap paper to estimate your answer to the nearest 10.



**CHECK**

e:

	H	T	O
d	5	8	2
-	3	4	6
<hr/>			
<hr/>			

e:

	H	T	O
e	6	5	1
-	4	3	8
<hr/>			
<hr/>			

e:

	H	T	O
f	9	6	2
-	6	4	9
<hr/>			
<hr/>			

e:

	H	T	O
g	8	8	2
-	6	6	6
<hr/>			
<hr/>			

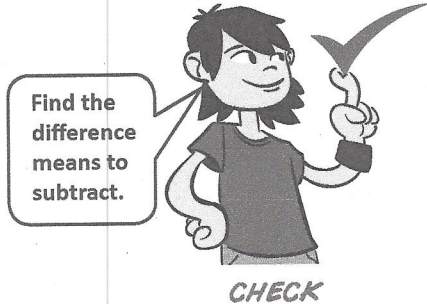
e:

	H	T	O
h	7	4	3
-	3	3	9
<hr/>			
<hr/>			



# Written methods – 3 digit subtraction with regrouping

- 2 This sign shows the distances of towns along a highway from where the sign is. Find the difference between these places.



Showtown	971 km
Roper	893 km
Ringer	692 km
Eagle Bay	595 km
Normanville	567 km

- a What is the distance between Ringer and Normanville?

	H	T	O
-			

km

- b What is the distance between Roper and Eagle Bay?

	H	T	O
-			

km

- c What is the distance between Showtown and Ringer?

	H	T	O
-			

km

- d What is the distance between Roper and Normanville?

	H	T	O
-			

km

# Written methods – 4 digit addition

1 Add these 4 digit numbers:

a

	Th	H	T	O
	3	3	5	3
+	1	0	2	1
<hr/>				
<hr/>				

b

	Th	H	T	O
	2	5	4	6
+	5	4	3	1
<hr/>				
<hr/>				

c

	Th	H	T	O
	4	5	2	4
+	2	1	6	4
<hr/>				
<hr/>				

d

	Th	H	T	O
	3	6	3	1
+	1	3	5	7
<hr/>				
<hr/>				

e

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

f

	Th	H	T	O
	2	4	3	2
+	5	3	4	6
<hr/>				
<hr/>				

2 Add these 4 digit numbers by regrouping:

a

	Th	H	T	O
	6	6	3	8
+	1	2	3	6
<hr/>				
<hr/>				

b

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

c

	Th	H	T	O
	3	4	2	9
+	1	1	3	9
<hr/>				
<hr/>				

3 Add these 4 digit numbers by regrouping:

a

	Th	H	T	O
	2	4	6	6
+	2	1	8	7
<hr/>				
<hr/>				

b

	Th	H	T	O
	3	1	8	7
+	3	0	5	9
<hr/>				
<hr/>				

c

	Th	H	T	O
	3	2	9	6
+	2	1	5	8
<hr/>				
<hr/>				

