



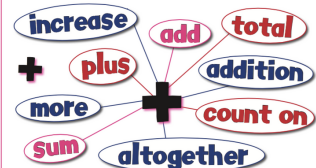
Add 4-digit numbers

Year Five Addition and Subtraction

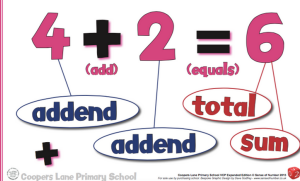
Subtract 5-digit numbers



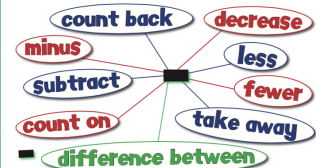
Addition Vocabulary



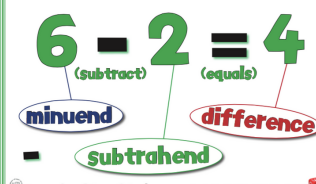
Addition Calculation



Subtraction Vocabulary



Subtraction Calculation



Thousands	Hundreds	Tens	Ones
1,000 1,000 1,000	100 100	10 10 10 10 10 10 10	1 1 1 1
1,000 1,000 1,000 1,000 1,000	100 100 100 100 100 100		1
8	8	7	5

Column Method

Starting with the smallest place value column, add each column in turn. Exchange tens, hundreds and/or thousands as needed.

4	5	8	6	4	
2	3	4	9	7	+
6	9	3	6	1	

TTh	Th	H	T	O
10,000 10,000 10,000	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	100 100 100 100 100 100 100 100 100 100 100 100 100 100	10 10 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 1 1 1 1 1 1
2	9	3	1	4

Column Method

Starting with the smallest place value column, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as needed.

		6	3		
3	5	7	4	2	-
	3	4	7	6	
3	2	2	6	6	



Rounding and estimating

Rounding to Estimate

$$41\ 635 + 7386 = 49\ 021$$

Round to ten:

$$41\ 630 + 7380 = 49\ 010$$

$$41\ 630 + 7390 = 49\ 020$$

$$41\ 640 + 7390 = 49\ 030$$

Rounding is not as accurate when both numbers are rounded up. A better estimate comes from "rounding" one down and one up.

Estimating on a Number Line



The arrow is about $\frac{3}{4}$ of the way across the line so it is 40 000.

Use the inverse to check:

53 476	
32 732	20 744

To check $53\ 476 - 32\ 732 = 20\ 744$
use $32\ 732 + 20\ 744 = 53\ 476$

Multistep problems

Using a Bar Model

The sum of two numbers is 25 567.

The difference is 1875.



Subtract 1875 from 25 567 = 23 692.

Halve 23 692 to find smaller number = 11 846.

Add 1875 to find larger number = 13 721.

£20			£20 is used to buy 2 books costing £3.75 and £8.49.
£3.75	£8.49	?	
£12.24		£7.76	How much change is given?

$$£3.75 + £8.49 = £12.24$$

$$£20.00 - £12.24 = £7.76$$

Inverse operations

Start with a number, subtract 409 and double. I end with 6264.

To find the starting number use the inverse: halve, then add 409. Half of 6264 = 3132. $3132 + 409 = 3541$. The starting number was 3541.