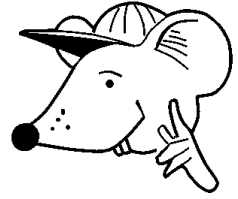# MATHEMATICS

Y4 Addition and Subtraction
4260
Use known number facts and place value to add or subtract

Equipment

Paper, pencil, ruler
Number cards
Stop clock

MathSphere

Concepts

In year 4 children are expected to be able to calculate mentally using a variety of methods. They are also expected to explain their methods, both orally and in writing.

The main skills involved are:

a. adding a single digit to a three or four digit number, crossing the tens boundary

   e.g. **365 + 8 =**

b. subtracting a single digit from a three or four digit number, crossing the tens boundary

   e.g. **363 - 7 =**

c. subtracting a single digit from a whole 100 or 1 000

   e.g. **1 000 - 7 =**

d. find the difference between two numbers which are close to a whole thousand, but either side of it

   e.g.   **3 005 - 2 998 =**

e. find what needs to be added to a whole hundreds number to make it up to the next thousand
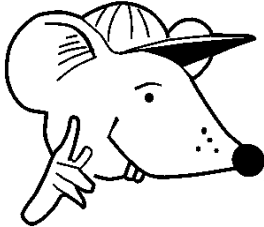
   e.g. **4 500 +** ☐ **= 5 000**

f. add or subtract any pair of two digit numbers

   e.g. **36 + 46 =**   or

   87 - 27 =

All methods used must be explained by the child, in words and writing.

Adding a single digit

Write the answers down to the sums below as quickly as you can - do not do any working out on paper.

1. 437 + 4 =   **2.** 528 + 3 =   **3.** 735 + 6 =   **4.** 243 + 9 =

5. 348 + 5 =   **6.** 139 + 2 =   **7.** 685 + 7 =   **8.** 816 + 8 =

9. 183 + 9 =   **10.** 242 + 9 =   **11.** 168 + 4 =   **12.** 534 + 7 =

13. 357 + 5 =   **14.** 712 + 8 =   **15.** 6 + 317 =   **16.** 5 + 326 =

17. 9 + 349 =   **18.** 8 + 487 =   **19.** 3 + 199 =   **20.** 4 + 297 =

Work out mentally the answers to the next set of sums. Next to each one write down the method you used to do it.

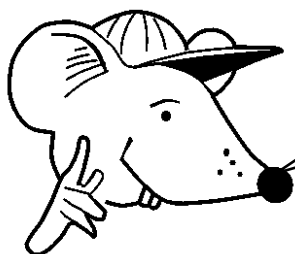|	
e.g. 538 + 6 =	I added two to make 40 then counted on four more to make 544
21. 279 + 5 =	Explain:
22. 538 + 8 =	Explain:
23. 175 + 6 =	Explain:
24. 429 + 8 =	Explain:
25. 377 + 6 =	Explain:

Adding a single digit

In your head, as fast as you can, answers only!
  Go!   Go!   Go!

1. 527 + 5 =   **2.** 617 + 4 =   **3.** 146 + 6 =   **4.** 162 + 9 =

5. 218 + 5 =   **6.** 149 + 2 =   **7.** 383 + 7 =   **8.** 619 + 8 =

9. 276 + 9 =   **10.** 151 + 9 =   **11.** 248 + 4 =   **12.** 814 + 7 =

13. 735 + 5 =   **14.** 807 + 8 =   **15.** 6 + 184 =   **16.** 5 + 227 =

17. 9 + 666 =   **18.** 8 + 777 =   **19.** 3 + 888 =   **20.** 4 + 789 =

Work out mentally the answers to the next set of sums. Next to each one write down the method you used to do it.

e.g. 187 + 6 =	I added three to make 190 then counted on three more to 193
21. 178 + 5 =	Explain:
22. 388 + 9 =	Explain:
23. 717 + 6 =	Explain:
24. 545 + 8 =	Explain:
25. 808 + 6 =	Explain:

Complete these questions by putting the correct number in the boxes.

1. 417 + 7 = ☐

2. 537 + 6 = ☐

3. 183 + ☐ = 190

4. 584 + ☐ = 593

5. ☐ + 6 = 344

6. ☐ + 4 = 172

7. 8 + ☐ = 460

8. 5 + ☐ = 212

9. 329 + 6 = ☐

10. 588 + 4 = ☐

Work out the next five answers. Write down how you did them.

11. 263 + ☐ = 271

12. 725 + ☐ = 733

13. ☐ + 5 = 611

14. ☐ + 8 = 540

15. 533 + 8 = ☐

Explain:

I counted on 7 up to 270 and then added one more making plus 8.

Explain:

Explain:

Explain:

Explain:

Complete these questions by putting the correct number in the boxes.

1. 328 + 6 = ☐   **2.** 646 + 5 = ☐

3. 292 + ☐ = 301   **4.** 693 + ☐ = 702

5. ☐ + 3 = 441   **6.** ☐ + 5 = 263

7. 9 + ☐ = 370   **8.** 6 + ☐ = 321

9. 413 + 9 = ☐   **10.** 698 + 4 = ☐

Work out the next five answers. Write down how you did them.

11. 372 + ☐ = 381

Explain: I counted on 8 up to 380 and then added one more making 9.

12. 816 + ☐ = 824

Explain:

13. ☐ + 6 = 722

Explain:

14. ☐ + 8 = 651

Explain:

15. 642 + 9 = ☐

Explain:

Subtracting single digits from whole hundreds

Complete these questions by putting the correct number in the boxes.

1. 200 - 7 =

2. 300 - 4 =

3. 700 - 5 =

4. 400 - 8 =

5. 500 - 6 =

6. 800 - 9 =

7. 600 - 3 =

8. 100 - 7 =

On the next set of questions write down how you did the sum in your head.

9. 700 - ☐ = 692

10. 200 - ☐ = 194

11. ☐ - 8 = 292

12. ☐ - 6 = 694

Explain:

Subtracting single digits from whole hundreds

Complete these questions by putting the correct number in the boxes.

1. 300 - 8 =

2. 400 - 5 =

3. 800 - 6 =

4. 200 - 9 =

5. 600 - 4 =

6. 300 - 2 =

7. 500 - 1 =

8. 900 - 7 =

On the next set of questions write down how you did the sum in your head.

9. 800 - = 793

10. 300 - = 295

11. - 7 = 193

12. - 8 = 792

Explain:

Subtraction crossing the hundreds boundary

Write the answers in the boxes below to make the sums correct.

1. 206 - 8 =

2. 105 - 7 =

3. 803 - 8 =

4. 207 - 8 =

5. 602 - 3 =

6. 301 - 2 =

7. 505 - 6 =

8. 902 - 4 =

Now try these:

9. 503 - [ ] = 497

10. 604 - [ ] = 598

11. 702 - [ ] = 695

12. 307 - [ ] = 299

13. [ ] - 8 = 293

14. [ ] - 7 = 594

15. [ ] - 4 = 98

16. [ ] - 7 = 698

Well, I guess you are getting quite quick at these now. Explain how you did them to someone else - a friend, your teacher.. or me if you can't find anyone else!!
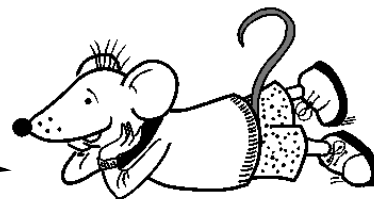
Subtraction crossing the hundreds boundary

Write the answers in the boxes below to make the sums correct.

1. 307 - 9 =

2. 202 - 5 =

3. 901 - 2 =

4. 308 - 9 =

5. 504 - 6 =

6. 605 - 8 =

7. 703 - 5 =

8. 906 - 9 =

Now try these:

9. 607 -   = 598

10. 401 -   = 393

11. 704 -   = 696

12. 305 -   = 297

13.   - 9 = 295

14.   - 8 = 494

15.   - 5 = 298

16.   - 7 = 299

How did you do these?
I did most of them by adding.
Funny how so many subtraction
sums can be done by adding.
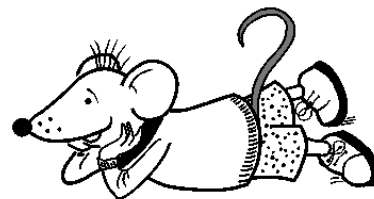
Subtracting from thousands

Without doing any working out on paper, write the answers to these sums:

1. 2 000 - 4 = [ ]

2. 3 000 - 8 = [ ]

3. 5 000 - 3 = [ ]

4. 6 000 - 7 = [ ]

5. [ ] - 4 = 2 996

6. [ ] - 7 = 1 993

7. [ ] - 8 = 1 992

8. [ ] - 5 = 5 995

9. 6 000 - [ ] = 5 991

10. 4 000 - [ ] = 3 993

11. 1 000 - [ ] = 997

12. 2 000 - [ ] = 1 994

Now you might find the next few a bit tricky - have a go anyway!

13. 5 002 - 7 = [ ]

14. 2 007 - 9 = [ ]

15. 4 005 - 8 = [ ]

16. 3 004 - 6 = [ ]

Subtraction crossing the thousands boundary

Without doing any working out on paper, write the answers to these sums:

1. 3 000 - 2 =

2. 4 000 - 1 =

3. 6 000 - 4 =

4. 8 000 - 5 =

5. ☐ - 6 = 8 994

6. ☐ - 8 = 2 992

7. ☐ - 3 = 4 997

8. ☐ - 7 = 5 993

9. 7 000 - ☐ = 6 992

10. 5 000 - ☐ = 4 994

11. 6 000 - ☐ = 5 998

12. 3 000 - ☐ = 2 991

It's going to get harder now, especially for all you super brains!

13. 4 006 - 8 =

14. 3 008 - 9 =

15. 7 001 - 4 =

16. 6 007 - 8 =

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Subtracting from thousands - harder examples

These look quite hard, but if you count on from the lower number, they suddenly become really easy!! Now, think how to do the next few sums….

1. 3 002 - 2 998 =

2. 1 003 - 998 =

3. 4 005 - 3 995 =

4. 7 002 - 6 996 =

5. 5 002 - 4 997 =

6. 2 002 - 1 999 =

..and the next ones. They look harder than they really are.

7. 6 002 -   = 9

8. 4 003 -   = 6

9. 5 004 -   = 7

10. 2 005 -   = 8

11.   - 3 998 = 5

12.   - 5 997 = 9

13.   - 5 994 = 6

14.   - 1 998 = 4

15.   - 2 992 = 8

16.   - 6 994 = 7

Subtracting from thousands - harder examples

1. 4 001 - 3 994 =

2. 2 002 - 1 995 =

3. 5 004 - 4 997 =

4. 8 005 - 7 999 =

5. 6 001 - 5 992 =

6. 3 003 - 2 998 =

Try counting back for the next four sums, each time going down to the thousands below.

7. 7 004 -   = 8

8. 5 002 -   = 7

9. 6 005 -   = 6

10. 3 006 -   = 9

..and I would count on for these next six.

11.   - 4 997 = 8

12.   - 4 996 = 8

13.   - 6 998 = 5

14.   - 993 = 9

15.   - 3 997 = 6

16.   - 5 995 = 6

Add and subtract pairs of two digit numbers

Work these out mentally - write the answers down.

1. 43 + 54 =   **2.** 63 + 25 =   **3.** 27 + 32 =

4. 37 + 25 =   **5.** 28 + 19 =   **6.** 52 + 49 =

7. 61 + 43 =   **8.** 26 + 63 =   **9.** 25 + 56 =

10. 74 + 18 =   **11.** 48 + 43 =   **12.** 73 + 45 =

Why do bees hum?
Because they've forgotten the words.

Half way through this page now!

13. 54 - 27 =   **14.** 32 - 16 =   **15.** 64 - 32 =

16. 31 - 18 =   **17.** 63 - 28 =   **18.** 50 - 43 =

19. 72 - 55 =   **20.** 91 - 64 =   **21.** 70 - 56 =

22. 61 - 48 =   **23.** 45 - 26 =   **24.** 90 - 76 =

Add and subtract pairs of two digit numbers

Work these out mentally - write the answers down.

1. 36 + 45 =   **2.** 54 + 34 =   **3.** 38 + 23 =

4. 46 + 36 =   **5.** 35 + 60 =   **6.** 61 + 58 =

7. 70 + 52 =   **8.** 42 + 79 =   **9.** 37 + 65 =

10. 83 + 26 =   **11.** 56 + 65 =   **12.** 72 + 19 =

What's the easiest way to count a large herd of cattle?
Use a cowculator.
You don't need one for these!

13. 72 - 47 =   **14.** 23 - 16 =   **15.** 75 - 42 =

16. 47 - 28 =   **17.** 74 - 58 =   **18.** 81 - 63 =

19. 93 - 75 =   **20.** 85 - 16 =   **21.** 52 - 26 =

22. 77 - 58 =   **23.** 44 - 36 =   **24.** 46 - 16 =

Answers

Page 3							
1. 441	**2.** 531	**3.** 741	**4.** 252	**5.** 353	**6.** 141	**7.** 692	**8.** 824
9. 192	**10.** 251	**11.** 172	**12.** 541	**13.** 362	**14.** 720	**15.** 323	**16.** 331
17. 358	**18.** 495	**19.** 202	**20.** 301	**21.** 284	**22.** 546	**23.** 181	**24.** 437 **25.** 383

Page 4							
1. 532	**2.** 621	**3.** 152	**4.** 171	**5.** 223	**6.** 151	**7.** 390	**8.** 627
9. 285	**10.** 160	**11.** 252	**12.** 821	**13.** 740	**14.** 815	**15.** 190	**16.** 232
17. 675	**18.** 785	**19.** 891	**20.** 793	**21.** 183	**22.** 397	**23.** 723	**24.** 553 **25.** 814

Page 5							
1. 424	**2.** 543	**3.** 7	**4.** 9	**5.** 338	**6.** 168	**7.** 452	**8.** 207
9. 335	**10.** 592	**11.** 8	**12.** 8	**13.** 606	**14.** 532	**15.** 541	with explanations.

Page 6							
1. 334	**2.** 651	**3.** 9	**4.** 9	**5.** 438	**6.** 258	**7.** 361	**8.** 315
9. 422	**10.** 702	**11.** 9	**12.** 8	**13.** 716	**14.** 643	**15.** 651	with explanations.

Page 7					
1. 193	**2.** 296	**3.** 695	**4.** 392	**5.** 494	**6.** 791
7. 597	**8.** 93	**9.** 8	**10.** 6	**11.** 300	**12.** 700

Page 8					
1. 292	**2.** 395	**3.** 794	**4.** 191	**5.** 596	**6.** 298
7. 499	**8.** 893	**9.** 7	**10.** 5	**11.** 200	**12.** 800

Page 9							
1. 198	**2.** 98	**3.** 795	**4.** 199	**5.** 599	**6.** 299	**7.** 499	**8.** 898
9. 6	**10.** 6	**11.** 7	**12.** 8	**13.** 301	**14.** 601	**15.** 102	**16.** 705

Page 10							
1. 298	**2.** 197	**3.** 899	**4.** 299	**5.** 498	**6.** 597	**7.** 698	**8.** 897
9. 9	**10.** 8	**11.** 8	**12.** 8	**13.** 304	**14.** 502	**15.** 303	**16.** 306

Page 11							
1. 1 996	**2.** 2 992	**3.** 4 997	**4.** 5 993	**5.** 3 000	**6.** 2 000	**7.** 2 000	**8.** 6 000
9. 9	**10.** 7	**11.** 3	**12.** 6	**13.** 4 995	**14.** 1 998	**15.** 3 997	**16.** 2 998

Page 12							
1. 2 998	**2.** 3 999	**3.** 5 996	**4.** 7 995	**5.** 9 000	**6.** 3 000	**7.** 5 000	**8.** 6 000
9. 8	**10.** 6	**11.** 2	**12.** 9	**13.** 3 998	**14.** 2 999	**15.** 6 997	**16.** 5 999

<u>Answers</u>

Page 13							
1. 4	**2.** 5	**3.** 10	**4.** 6	**5.** 5	**6.** 3	**7.** 5 993	**8.** 3 997
9. 4 997	**10.** 1 997	**11.** 4 003	**12.** 6 006	**13.** 6 000	**14.** 2 002	**15.** 3 000	**16.** 7 001

Page 14							
1. 7	**2.** 7	**3.** 7	**4.** 6	**5.** 9	**6.** 5	**7.** 6 996	**8.** 4 995
9. 5 999	**10.** 2 997	**11.** 5 005	**12.** 5 004	**13.** 7 003	**14.** 1 002	**15.** 4 003	**16.** 6 001

Page 15							
1. 97	**2.** 88	**3.** 59	**4.** 62	**5.** 47	**6.** 101	**7.** 104	**8.** 89
9. 81	**10.** 92	**11.** 91	**12.** 118	**13.** 27	**14.** 16	**15.** 32	**16.** 13
17. 35	**18.** 7	**19.** 17	**20.** 27	**21.** 14	**22.** 13	**23.** 19	**24.** 14

Page 16							
1. 81	**2.** 88	**3.** 61	**4.** 82	**5.** 95	**6.** 119	**7.** 122	**8.** 121
9. 102	**10.** 109	**11.** 121	**12.** 91	**13.** 25	**14.** 7	**15.** 33	**16.** 19
17. 16	**18.** 18	**19.** 18	**20.** 69	**21.** 26	**22.** 19	**23.** 8	**24.** 30