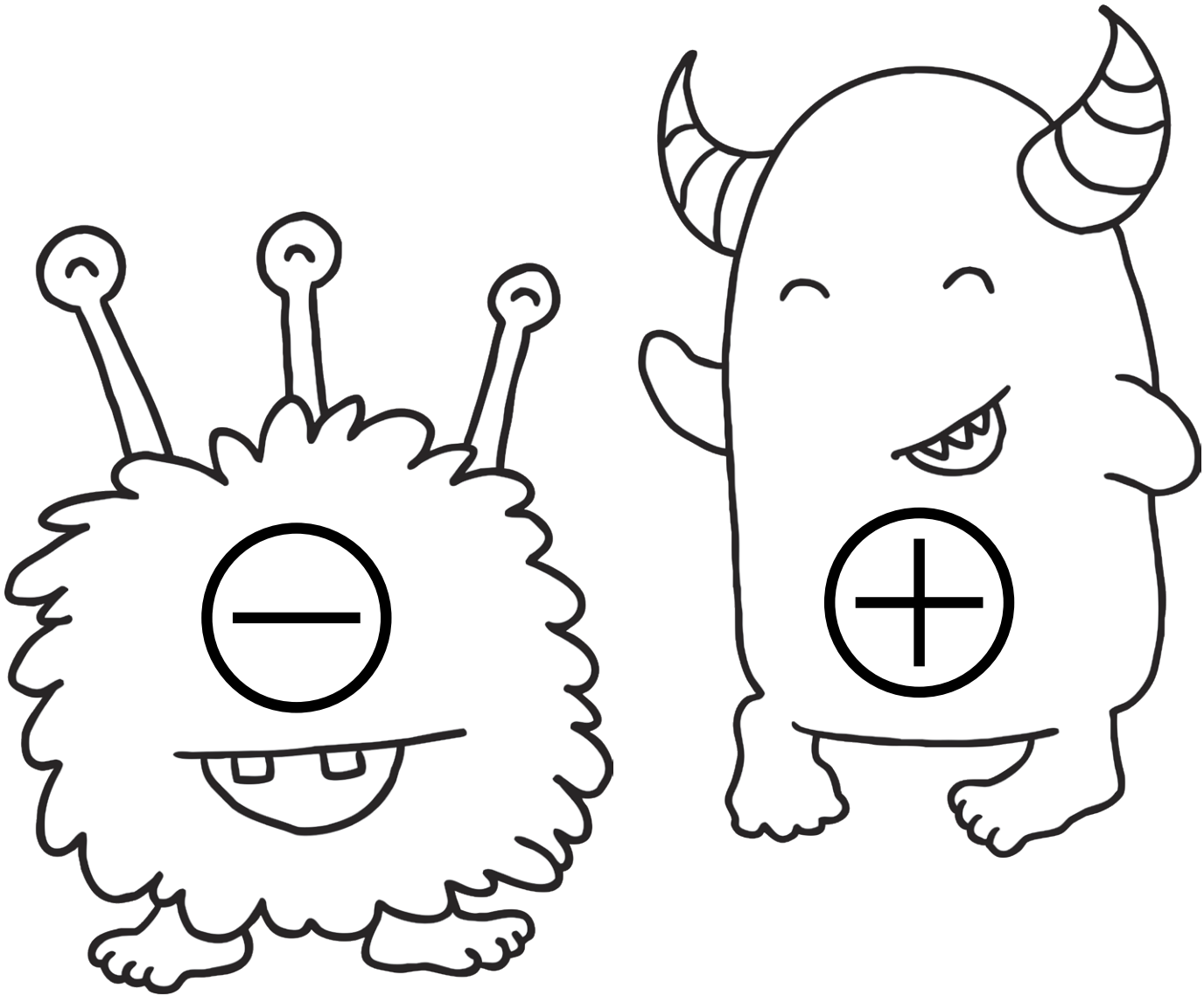
Addition and Subtraction Workbook



Home Learning Year 3 Maths Workbook Pack

Year 2 Programme of Study – Addition and Subtraction

Statutory Requirements	Worksheet	Page Number	Notes
Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.	• Hops to and from 10 • Addition to 20 on a number line • Subtraction within 20 on a number line	1 - 2 3 - 5 6 - 8	
Solve problems with addition and subtraction. Applying their increasing knowledge of mental and written methods.	• Monsters colour by number addition and subtraction up to 20	9	
Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	• Addition and Subtraction facts to 20 • Deriving Facts to 100	10 11	
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:			
A two-digit number and ones.	• Adding/subtracting 2-digit numbers and ones crossing 10	12 - 15	
A two-digit number and tens.	• Adding/subtracting 2-digit numbers and tens not crossing 100	16 - 18	
Two two-digit numbers.	• Adding two 2-digit numbers beyond 100 • Subtracting tens and ones from 2-digit numbers not crossing 100 • Subtracting tens and ones from 2- digit numbers crossing 100	19 - 21 22 - 23 24 - 25	
Adding three one-digit numbers.	• Adding three one-digit numbers using number facts to 10 • Adding three one-digit numbers - Which 3 numbers?	26 27	

Statutory Requirements	Worksheet	Page Number	Notes
Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	• Addition can be done in any order - subtraction can't!	28 - 29	
Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	• Number family worksheets • Using Inverse Operations to check – Two Digits Plus One Digit	30 - 33 34 - 35	
Estimate the answer to a calculation and use inverse operations to check answers.	Inverse checking 2 digit by 2 digit mixed with carrying and exchanging choice of method worksheet Inverse checking 3 digit by 2 digit mixed with carrying and exchanging choice of method worksheet Inverse checking 3 digit by 3 digit mixed with carrying and exchanging worksheet Inverse create addition and subtraction calculations from a set of 3 numbers worksheet Estimating Answers Worksheet Exemplary Calculation Procedure	18 19 20 21 22-23 24-25	
Solve problems, including missing number problems, using number facts, place value value, and more complex addition and subtraction.	Addition and subtraction word problems worksheet year 3 Addition and subtraction using worded calculations year 3	26 27	

Adding Ones to a 3-Digit Number

Calculate the answers to the following:

1. 136 + 3 = _____
2. 212 + 4 = _____
3. 381 + 6 = _____
4. 494 + 5 = _____
5. 533 + 4 = _____
6. 620 + 7 = _____
7. 725 + 4 = _____
8. 952 + 7 = _____
9. 165 + 8 = _____
10. 224 + 7 = _____
11. 388 + 6 = _____
12. 478 + 5 = _____
13. 529 + 4 = _____
14. 645 + 9 = _____
15. 713 + 8 = _____
16. 995 + 6 = _____
17. 165 + 7 = _____
18. 252 + 6 = _____
19. 395 + 9 = _____
20. 478 + 1 = _____
21. 546 + 7 = _____
22. 659 + 3 = _____
23. 765 + 3 = _____
24. 971 + 8 = _____

Challenge

Explain how you would use 7 + 8 = 15 to calculate 537 + 8.

Subtracting Ones from a 3-Digit Number

Calculate the answers to the following:

1. 166 - 3 = _____
2. 295 - 4 = _____
3. 307 - 5 = _____
4. 489 - 7 = _____
5. 578 - 4 = _____
6. 636 - 2 = _____
7. 794 - 3 = _____
8. 959 - 8 = _____
9. 145 - 8 = _____
10. 213 - 7 = _____
11. 383 - 5 = _____
12. 491 - 4 = _____
13. 571 - 5 = _____
14. 678 - 9 = _____
15. 722 - 6 = _____
16. 982 - 4 = _____
17. 122 - 6 = _____
18. 279 - _____ = 271
19. _____ + = 329
20. 459 - 3 = _____
21. 566 + _____ = 557
22. 659 - 4 = _____
23. 779 - 5 = _____
24. _____ + 8 = 944

Challenge

Explain how you would use 14 - 8 = 6 to calculate 384 - 8.

Adding Tens to a 3-Digit Number

Calculate the answers to the following:

1. 153 + 30 = _____
2. 272 + 20 = _____
3. 301 + 60 = _____
4. 413 + 70 = _____
5. 523 + 40 = _____
6. 630 + 20 = _____
7. 737 + 50 = _____
8. 939 + 60 = _____
9. 142 + 80 = _____
10. 267 + 70 = _____
11. 398 + 60 = _____
12. 451 + 50 = _____
13. 564 + 80 = _____
14. 675 + 90 = _____
15. 761 + 70 = _____
16. 964 + 60 = _____
17. 102 + _____ = 172
18. 282 + 60 = _____
19. _____ + 30 = 424
20. 488 + 40 = _____
21. 537 + 90 = _____
22. _____ + 30 = 686
23. 770 + _____ = 850
24. 961 + 70 = _____

Challenge

Explain how you would use 7 + 8 = 15 to calculate 537 + 8.

Subtracting Tens from a 3-Digit Number

Calculate the answers to the following:

1. 178 - 30 = _____
2. 282 - 40 = _____
3. 377 - 50 = _____
4. 495 - 70 = _____
5. 581 - 40 = _____
6. 625 - 20 = _____
7. 767 - 50 = _____
8. 992 - 80 = _____
9. 131 - 80 = _____
10. 224 - 60 = _____
11. 357 - 90 = _____
12. 413 - 30 = _____
13. 537 - 50 = _____
14. 612 - 70 = _____
15. 727 - 60 = _____
16. 933 - 90 = _____
17. 134 - _____ = 74
18. 213 - 80 = _____
19. _____ - 70 = 276
20. 403 - 30 = _____
21. _____ - 90 = 486
22. 619 - 20 = _____
23. 717 - _____ = 647
24. 941 - 50 = _____

Challenge

Explain what other calculations you might use 13 - 8 = 5.

Adding Hundreds to a 3-Digit Number

Calculate the answers to the following:

1. 163 + 500 = _____
2. 345 + 600 = _____
3. 582 + 400 = _____
4. 273 + 300 = _____
5. 561 + 200 = _____
6. 170 + 700 = _____
7. 207 + 500 = _____
8. 719 + 100 = _____
9. 372 + 800 = _____
10. 460 + 700 = _____
11. 508 + 900 = _____
12. 721 + 500 = _____
13. 549 + 800 = _____
14. 672 + 700 = _____
15. 701 + 900 = _____
16. 927 + 600 = _____
17. 116 + 700 = _____
18. 352 + _____ = 1252
19. _____ + 400 = 859
20. 824 + 300 = _____
21. 562 + 900 = _____
22. _____ + 300 = 916
23. 752 + _____ = 1552
24. 911 + 700 = _____

Challenge

Explain how you would use 9 + 4 = 13 to calculate 931 + 400.

Subtracting Hundreds from a Three Digit Number

Calculate the answers to the following:

1. 353 - 200 = _____
2. 416 - 400 = _____
3. 531 - 300 = _____
4. 789 - 500 = _____
5. 564 - 300 = _____
6. 820 - 600 = _____
7. 707 - 500 = _____
8. 919 - 700 = _____
9. 268 - 200 = _____
10. 416 - 100 = _____
11. 547 - 300 = _____
12. 346 - 100 = _____
13. 564 - 400 = _____
14. 893 - 600 = _____
15. 507 - 500 = _____
16. 919 - 400 = _____

Challenge

Take any three digit number. You can subtract 100, 200, 300 or 400 once each, but you must not go below 0.

***e.g.* 672 - 100 = 572, 572 - 300 = 272, 272 - 200 = 72.**
100, 300 and 200 were subtracted to get to 72.

Can you always get to a number between or equal to 100 and 1?

If you use as many sutractions as possible are there any patterns?

Adding 3-Digit and 2-Digit Numbers - No Carrying

Calculate the answers to the following:

534 + 45 =	213 + 62 =	304 + 84 =	672 + 16 =
130 + 56 =	802 + 92 =	529 + 50 =	281 + 17 =
552 + 36 =	607 + 72 =	628 + 21 =	327 + 51 =
474 + 15 =	153 + 44 =	371 + 22 =	

Calculate the following calculations:

4 _ 2 + 15 = 467	_ 53 + 4 _ = 796	8 _ 8 + 21 = 84 _

Adding 3-Digit and 2-Digit Numbers - With Carrying

Calculate the answers to the following:

673 + 18 =	457 + 25 =	304 + 69 =	615 + 38 =
149 + 16 =	805 + 85 =	672 + 42 =	581 + 67 =
292 + 36 =	670 + 72 =	662 + 75 =	387 + 51 =
476 + 45 =	158 + 74 =	379 + 26 =	

Calculate the following calculations:

3 _ 2 + 55 = 437	_ 47 + 4 _ = 796	8 _ 8 + 65 = _ _ 4 _

Subtracting 2-Digit Numbers from 3-Digit Numbers No Exchanging

Calculate the answers to the following:

479 − 18 =	337 − 25 =	584 − 61 =	478 − 38 =
748 − 16 =	563 + 12 =	652 − 32 =	569 − 67 =
298 − 36 =	677 − 72 =	697 − 75 =	387 − 51 =

Calculate the following calculations:

3 _ 7 − 5 _ = 302	54 _ − _ 2 = 515	8 _ 8 − 6 _ = 833

Subtracting 2-Digit Numbers from 3-Digit Numbers With Exchanging

Calculate the answers to the following:

343 − 18 =	641 − 25 =	472 − 67 =	473 − 38 =
620 − 16 =	364 + 46 =	415 − 33 =	528 − 67 =
126 − 31 =	673 − 82 =	607 − 64 =	916 − 53 =

Calculate the following calculations:

2 _ 2 − 3 _ = 220	47 _ − _ 4 = 449	8 _ 1 − 6 _ = _ 24

Adding Two 3-Digit Numbers - No Carrying

Calculate the answers to the following:

273 + 514 =	451 + 225 =	304 + 463 =	615 + 172 =
153 + 716 =	805 + 102 =	572 + 213 =	531 + 267 =
202 + 236 =	370 + 116 =	622 + 375 =	312 + 251 =
476 + 403 =	155 + 234 =	371 + 628 =	

Calculate the following calculations:

4 _ 2 + _ 3 _ = 437	941 + 4 _ = 9 _ 6	7 _ 5 + 22 = 74 _

Adding Two 3-Digit Numbers - With Carrying

Calculate the answers to the following:

323 + 518 =	607 + 228 =	507 + 463 =	319 + 142 =
257 + 706 =	505 + 109 =	672 + 243 =	591 + 367 =
572 + 336 =	760 + 615 =	822 + 345 =	912 + 461 =
476 + 485 =	655 + 738 =	379 + 648 =	

Calculate the following calculations:

5 _ 8 + _ 3 _ = 1487	641 + _ 7 _ = 124 _	4 _ 5 + 878 = 1 _ 5 _

Subtracting Two 3-Digit Numbers - No Exchanging

Calculate the answers to the following:

569 - 315 _____	346 - 125 _____	774 - 453 _____	652 - 420 _____
628 - 305 _____	573 + 512 _____	832 - 232 _____	599 - 467 _____
298 - 136 _____	687 - 471 _____	988 - 575 _____	768 - 251 _____
555 - 345 _____	596 - 374 _____	368 - 220 _____	

Calculate the following calculations:

34_ - 2 _ 4 _ _ 33	_ 48 - 30 _ 2 _ 6	7 _ 4 - _ 60 43 _

Subtracting Two 3-Digit Numbers - With Exchanging

Calculate the answers to the following:

451 - 218 _____	840 - 525 _____	472 - 238 _____	481 - 323 _____
690 - 526 _____	726 + 419 _____	427 - 233 _____	519 - 450 _____
353 - 136 _____	627 - 471 _____	622 - 394 _____	951 - 652 _____

Calculate the following calculations:

73_ - 4 _ 7 _ _ 81	_ 70 - 29 _ 1 _ 6	_ 01 - 4 _ 8 33 _

Checking 2 by 2-Digit Mixed Calculations - With Carrying and Exchanging

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

76 + 45 =	**97 - 38 =**
72 - 48 =	**64 + 38 =**
82 - 65 =	**49 + 46 =**
93 + 59 =	**68 - 29 =**

Challenge

Explain how you might check your answer to this calculation: **47 + 54 + 35 =**

Checking 3 by 2-Digit Mixed Calculations - With Carrying and Exchanging

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

419 + 79 =	**608 - 57 =**
437 - 49 =	**372 + 88 =**
673 - 46 =	**514 + 49 =**
586 + 97 =	**970 - 74 =**

Challenge

Use 2 different methods to calculate and check this calculation. **365 - 87 =**
Can you explain which method you find better?

Checking 3 by 3-Digit Mixed Calculations - With Carrying and Exchanging

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

245 + 356 =	**562 - 347 =**
703 - 459 =	**509 + 389 =**
825 - 286 =	**672 + 319 =**
592 + 209 =	**913 - 387 =**

Challenge

Explain how you might use the inverse to check this calculation. **541 + 518 + 265 =**

Checking 3 by 3-Digit Mixed Calculations - With Carrying and Exchanging

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

34 23 57	16 59 75	92 45 137
____ + ____ = ____ ____ + ____ = ____ ____ − ____ = ____ ____ − ____ = ____	____ + ____ = ____ ____ + ____ = ____ ____ − ____ = ____ ____ − ____ = ____	____ + ____ = ____ ____ + ____ = ____ ____ − ____ = ____ ____ − ____ = ____
87 240 153	**393 240 153**	**616 240 153**
____ + ____ = ____ ____ + ____ = ____ ____ − ____ = ____ ____ − ____ = ____	____ + ____ = ____ ____ + ____ = ____ ____ − ____ = ____ ____ − ____ = ____	____ + ____ = ____ ____ + ____ = ____ ____ − ____ = ____ ____ − ____ = ____

Create two addition and two subtraction calculations from each set of three numbers, writing the full calculations in the given box.

26 97 123	86 134 48	364 213 151
652 589 63	**572 801 229**	**371 912 1283**

Estimated Answers

To answer the following questions decide which multiple of 10 each number is closest to and then add or subtract the numbers. Trying to answer quickly will help you to practise estimating rather than working the answer out.

Example

1. 32 + 59 =

My estimate: 30 + 60 = 90

Estimating Addition:

1. 32 + 59 =

My estimate: ☐ + ☐ = 

2. 23 + 28 =

My estimate: ☐ + ☐ = 

3. 51 + 53 =

My estimate: ☐ + ☐ = 

4. 81 + 33 =

My estimate: ☐ + ☐ = 

5. 89 + 27 =

My estimate: ☐ + ☐ = 

6. 59 + 92 =

My estimate: ☐ + ☐ = 

7. 132 + 19 =

My estimate: ☐ + ☐ = 

8. 88 + 109 =

My estimate: ☐ + ☐ = 

9. 127 + 152 =

My estimate: ☐ + ☐ = 

10. 353 + 281 =

My estimate: ☐ + ☐ = 

Estimating Subtraction:

1. 58 - 32 =

My estimate: ☐ - ☐ = 

2. 79 - 22 =

My estimate: ☐ - ☐ = 

3. 104 - 51 =

My estimate: ☐ - ☐ = 

4. 121 - 33 =

My estimate: ☐ - ☐ = 

5. 129 - 27 =

My estimate: ☐ - ☐ = 

6. 229 - 92 =

My estimate: ☐ - ☐ = 

7. 132 - 17 =

My estimate: ☐ - ☐ = 

8. 288 - 109 =

My estimate: ☐ - ☐ = 

9. 257 - 152 =

My estimate: ☐ - ☐ = 

10. 353 - 281 =

My estimate: ☐ - ☐ = 

Exemplary Calculation Procedure

Estimating, Answering and Checking with Inverse Operation

1. Begin by estimating your answer using the nearest multiple of 10 for each number.
2. Perform the exact calculation using your chosen method.
3. Check that your answer is close to your estimate.
4. Check your answer is correct by working backwards using the inverse operation.

Addition Calculations:

Example:

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse	Correct?
e.g. 57 + 39	60 + 40 = 100	5 7 + 3 9 9 6	96/100 = Yes!	8 ~~9~~ 1 6 - 3 9 5 7	Yes!

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse	Correct?
1. 39 + 23					
2. 18 + 54					
3. 67 + 54					
4. 126 + 43					

5. 218 + 133						

Subtraction Calculations:

Example:

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse	Correct?
e.g. 84 - 29	80 – 30 = 50	$\begin{array}{r} {}^{7}\not{8}\,4 \\ -\;2\,9 \\ \hline 5\,5 \end{array}$	50/55 = Yes!	$\begin{array}{r} 5\,5 \\ +\;2\,9 \\ \hline 8\,4 \\ {}^{1} \end{array}$	Yes!

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse	Correct?
1. 59 - 22					
2. 97 - 18					
3. 126 - 32					
4. 188 - 52					
5. 352 - 169					

Addition and Subtraction Word Problems

Solve the following problems:

1. There are 167 books in one classroom and 392 books in the other.
   How many books are there altogether in both classrooms?
2. Jay has a collection of 263 football cards. His brother has 189.
   How many more football cards does Jay have?
3. A family drive 208 miles from London to Manchester and then 213 miles to Glasgow.
   How far did they travel altogether?
4. A cricket team score 456 in the first innings and 249 in the second innings.
   How many runs did they score altogether?
5. Jenny has £6.67. She spends £2.85 on a present for her brother.
   How much money does she have altogether.
6. Abi collects stamps. She has 351 in a box and 456 in a book.
   How many does she have altogether?
7. A lorry driver has a 561 mile journey. He stops for a break after 314 miles.
   How much further has he to travel?
8. A pack of Christmas cards costs £5.49.
   How much change would there be from £10.00?
9. A packet of lentils weighs 450g and a packet of kidney beans weighs 385g.
   How much do they both weigh altogether?
10. A shopkeeper has 367 bottles of lemonade.
    He orders 480 more. How many bottles of lemonade will he have now?

Challenge

Two children have 720 marbles between them.
Jay has 126 more than Abi.
How many does Abi have?

Addition and Subtraction Using Worded Calculations

Solve the following problems:

1. What number is five more than two hundred and fifty nine?
2. What number is 451 subtract 246?
3. How much larger is 817 than 662?
4. What number is three hundred and six more than four hundred and nineteen?
5. What number is the difference between two hundred and sixteen and three hundred and nine?
6. Add five hundred and ninety three and three hundred and sixty eight.
7. What number is four hundred and sixty five less than seven hundred and twelve?
8. Increase £5.73 by £6.45.
9. What number is the sum of six hundred and forty and five hundred and seventy six?
10. Decrease 790 by 213.
11. Add together £2.58, £6.27 and £7.03
12. What number is two hundred and fourteen minus one hundred and seventeen?
13. Take £271 away from £604
14. If I increase a number by 382 and get 901, what number did I start with?
15. Add together 219 and 734, then subtract 486.

Challenge

Use the digits 1 to 9 to make three numbers that add up to 900.