



# Colin and Coco's Daily Maths Workout

Workout 4.6

Answers

Addition and Subtraction:  
Formal written methods





## Addition and Subtraction Workout

Workout A

$636 + 557 = 1193$

$4456 + 837 = 5293$

$5578 + 2367 = 7945$

$836 + 787 = 1623$

$7056 + 286 = 7342$

$4346 + 3257 = 7603$

$976 + 767 = 1743$

$68 + 8978 = 9046$

$2076 + 7967 = 9043$

## Addition and Subtraction Workout

Workout B

$4763 - 847 = 3916$

$4552 - 1378 = 3174$

$4048 - 3084 = 964$

$7431 - 787 = 6644$

$6253 - 2768 = 3485$

$8072 - 3308 = 4764$

$1354 - 768 = 586$

$7367 - 5658 = 1709$

$9847 - 8974 = 873$

## Addition and Subtraction Workout

Workout C

$836 + 487 = 1323$

$6306 - 2688 = 3618$

$3094 + 938 = 4032$

$1649 = 2436 - 787$

$9473 = 7686 + 1787$

$6558 = 7434 - 876$

$756 + 3865 = 4621$

$8143 - 7267 = 876$

$2706 + 867 = 3573$



# Subtraction Target Game

Workout D

You need:

1 - 7 cards (at the end of this pack.)

Pen and paper

To play:

Shuffle the cards and place them face down on the table.

Every time it is your turn you turn over 4 cards and use them in any order to make a 4-digit number.

Subtract your 4-digit number from 8114.

You are aiming to get an answer as close to the target number of 3855 as you can.

Work out the difference between your answer and the target number of 3855.

This is your score.

I have 6, 4, 3 and 7

I need to decide which 4-digit number to make.

$$\begin{array}{r} 7 \quad 10 \quad 10 \quad 1 \\ 8114 \\ - 4367 \\ \hline 3747 \end{array}$$

I score 108 (because  $3855 - 3747 = 108$ )

To win:

The winner is the player with the lowest total score after three goes each.

Try changing the starting number (between 7000 and 9000) or the target number to change the challenge.



## Missing Number Workout

Workout E

Put digits in the empty boxes to complete the calculations.  
Complete each one in several different ways.

Possible  
Solution

$$\begin{array}{r} 4 \quad \boxed{7} \quad \boxed{8} \quad 9 \\ + \quad 5 \quad 4 \quad \boxed{2} \\ \hline \boxed{5} \quad 3 \quad 3 \quad 1 \end{array}$$

$$\begin{array}{r} \boxed{6} \quad \boxed{3} \quad 1 \quad 4 \\ - \quad \boxed{1} \quad 7 \quad \boxed{0} \quad \boxed{9} \\ \hline 4 \quad 6 \quad 0 \quad 5 \end{array}$$

Are there any boxes that it is impossible to put a 5 in?  
Why?

Are there any boxes that could have any of the digits in them?

Now complete all the calculations together using the digits  
0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.



## Subtract and Add Surprise

Workout F

Choose three digits.

Make a 3-digit number with the hundreds digit larger than the ones digit.

So, for example, if you chose 3, 6 and 7 you could make 763

Now reverse the digits and subtract your new number from your first one.

$$\begin{array}{r} 6 \text{ } ^{451} \\ 763 \\ - 367 \\ \hline 396 \end{array}$$

Now use the answer, reverse it and add these two numbers together.

$$\begin{array}{r} 396 \\ + 693 \\ \hline 1089 \\ \hline 1 \end{array}$$

If the answer to the subtraction has only two digits put a zero in the hundreds column before you reverse it.

Start again with three new digits.

Repeat this several times. What do you notice?

Does it always happen?



## Word Problem Workout

Workout G

Colin is doing the Three Peaks Challenge.

Ben Nevis is 1345m high. Scafell Pike is 978m high. Snowdon is 1085m high.

How much taller than Scafell Pike is Ben Nevis?

367m

Coco has saved £3102

She spends £263 on a new settee.

How much does she have left?

£2839

Colin has 5000 leaflets to deliver.

He delivers 2124 in week 1. He then delivers 1980 in week 2.

How many leaflets has he still got to deliver?

896

An explorer is travelling the length of South American rivers.

Purus River is 2960km long. Madiera River is 3380km long. Paraguay River is

2695km long.

What is the total distance of his river exploration?

9035km

In recent research Colin finds the populations of some villages.

Brinkworth 1387

Brockworth 7381

Purton 3897

How much larger is the population of Brockworth than Purton?

3484

Create your own problems for adding or subtracting 4-digit numbers.



# Who am I? Workout

Use the clues to work out Colin's mystery number.

You may want to cross numbers off on the 100 grid as you consider each clue.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- 1) I am an even number more than 30
- 2) I am not a multiple of 12
- 3) My digits are not equal
- 4) I am not a multiple of 9
- 5) The difference between my digits is less than 5
- 6) The sum of my digits is even
- 7) I am not a multiple of 10
- 8) My tens digit is more than my ones digit
- 9) Both of my digits are factors of 12
- 10) I am the product of two consecutive numbers

Colin's mystery number is 42

Create your own 'Who am I?' puzzle

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Please share your puzzle with Colin @MathsCanDo



## Cards for the Games

1

2

3

4

5

6

7

8

9