

Colin and Coco's Daily Maths Workout

Workout 5.1 & 5.2

Answers





Workout A

Multiplication Workout

You may need to work these out on another piece of paper. Some could be done mentally.

$42 \times 34 = 1428$

$262 \times 15 = 3930$

$48 \times 20 = 960$

$53 \times 21 = 1113$

$436 \times 28 = 12208$

$83 \times 50 = 4150$

$34 \times 23 = 782$

$563 \times 29 = 16327$

$69 \times 100 = 6900$

$46 \times 32 = 1472$

$654 \times 37 = 24198$

$75 \times 99 = 7425$

Workout B

Multiplication Workout

You may need to work these out on another piece of paper. Some could be done mentally.

$2.4 = 6 \times 0.4$

$5.6 = 7 \times 0.8$

$9 = 6 \times 1.5$

$2.1 = 7 \times 0.3$

$3.6 = 9 \times 0.4$

$9.6 = 8 \times 1.2$

$10.8 = 9 \times 1.2$

$2.8 = 0.7 \times 4$

$17.5 = 7 \times 2.5$

$4.8 = 6 \times 0.8$

$4 = 0.8 \times 5$

$12.6 = 9 \times 1.4$

Workout C

Multiplication Workout

You may need to work these out on another piece of paper. Some could be done mentally.

$124 \times 37 = 4588$

$48 \times 2364 = 113472$

$45 \times 99 = 4455$

$304 \times 46 = 13984$

$39 \times 6274 = 244686$

$34 \times 60 = 2040$

$231 \times 68 = 15708$

$28 \times 3068 = 85904$

$80 \times 70 = 5600$

$134 \times 73 = 9782$

$67 \times 7146 = 478782$

$3 \times 0.8 = 2.4$



Join Up - A Multiplication Game

Workout D

You need:

Multiplication by 7 Board

Counters or colours

To play:

Every time it is your turn you cover two numbers on the board.

One of your numbers multiplied by 7 must equal your other number.

The two numbers you cover do not need to be next to each other on the board.

e.g. You could choose to cover a 0.5 and a 3.5 because $0.5 \times 7 = 3.5$

or you could choose to cover a 80 and a 560 because $80 \times 7 = 560$ and so on.

To win:

The winner is the first player to cover five numbers in a line, horizontally, vertically or diagonally.

Multiplication by 7 Board

8	0.6	50	80	140	0.3	280	0.7	0.9	630
30	5.6	210	56	0.8	490	3.5	5.6	60	0.4
0.9	4.2	80	0.5	90	350	0.6	6.3	0.3	420
20	560	2.1	560	2.8	0.2	40	30	560	90
350	280	70	1.4	60	2.1	90	0.7	5.6	1.2
3.5	0.5	40	0.7	0.4	1.4	2.8	50	350	4.9
0.8	280	0.3	490	420	210	60	4.9	8.4	630
4.2	210	630	6.3	2.8	0.5	630	0.4	40	1.2
0.9	0.2	490	3.5	90	420	0.8	8.4	50	4.9
60	40	30	80	70	2.1	6.3	280	70	420



Missing Number Workout

Workout E

Solve each calculation in at least two ways.

Possible Solutions

$$\begin{array}{|c|} \hline 1 \\ \hline \end{array} . \begin{array}{|c|} \hline 2 \\ \hline \end{array} \times \begin{array}{|c|} \hline 4 \\ \hline \end{array} = 4.8$$

0 6 8

$$\begin{array}{|c|} \hline 1 \\ \hline \end{array} . \begin{array}{|c|} \hline 2 \\ \hline \end{array} \times \begin{array}{|c|} \hline 2 \\ \hline \end{array} = 2.4$$

0 8 3

$$\begin{array}{|c|} \hline 1 \\ \hline \end{array} . \begin{array}{|c|} \hline 2 \\ \hline \end{array} \times \begin{array}{|c|} \hline 3 \\ \hline \end{array} = 3.6$$

0 9 4

$$\begin{array}{|c|} \hline 0 \\ \hline \end{array} . \begin{array}{|c|} \hline 9 \\ \hline \end{array} \times \begin{array}{|c|} \hline 2 \\ \hline \end{array} = 1.8$$

0 3 6

Find the missing digits.

Solve each calculation in several ways if possible.

$$\boxed{6} \times \boxed{0} . 3 = \boxed{1} . 8$$

$$7 \times 0 . \boxed{5} = \boxed{3} . 5$$

$$6 . 3 = 0 . \boxed{9} \times \boxed{7}$$

$$3 \times 0 . \boxed{8} = \boxed{2} . \boxed{4}$$

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



Garden Challenge

Workout F

Mrs. Davies has decided to give her garden a makeover.

To sort out one of the flower borders she needs 5 bags of compost to mix with her home grown compost. Compost costs £3.98 per bag or 4 bags for the price of 3. How much will the compost cost? **£15.92**

She sets herself a budget of £300 for the plants. The following table shows what she would like to buy.

Can she buy all the plants she wants? Estimate first then calculate.

No. Total £306.92

<u>Plant</u>	<u>Cost per plant</u>	<u>Quantity</u>
Purple Shrub	£12.48	4
Yellow Bush	£8.96	7
Orange Climber	£6.64	5
Red Berry	£15.38	2
Blue Spreading Plant	£4.78	12
Bag of 25 bulbs	£9.12	8



Word Problem Workout

Colin is having a party.

He buys 36 packs of crisps. Each pack holds 25g of crisps.

How many grams of crisps does he have in total? **900g**

Colin has taken up jogging.

There are 1760 yards in a mile.

If he jogs 26 miles, how many yards is that? **45,760**

A chef buys crates of apples.

Each crate has 135 apples in it.

He buys 19 crates of apples then uses 1500 apples.

How many apples are left? **1,065**

Brand new cars cost a dealer £9879 each.

A dealer has £400,000 and he buys 34 cars.

How much money does he have left? **£64,114**

Colin is jogging again! He is aiming to jog a total of 25km.

He does three sessions of 2.3km, three sessions of 2.4km and six sessions of 1.5km. How much further does he need to jog? **23.1km**

Create your own problems for 1245×16



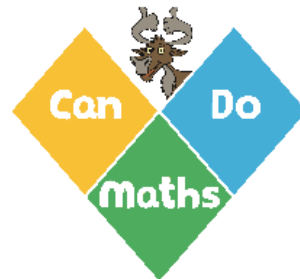
1 - 20 Workout

Workout H

Using the digits from today's date create all the numbers from 1 - 20. You can use any or all of the four operations. You must use all the digits every time.

Example: 27/3/20 (27th March)

1	11	
2	12	
3	13	$7 \times 2 = 14$ $3 - 2 - 0 = 1$ $14 - 1 = 13$
4	14	$7 + 2 - 3 - 2 - 0 = 4$
5	15	
6	16	$7 + 3 - 2 - 2 - 0 = 6$
7	17	
8	18	
9	19	$7 \times 2 - 3 - 2 - 0 = 9$
10	20	



Colin and Coco's Daily Maths Workout

Workout 5.2

Division





Workout A

Division Workout

You may need to work these out on another piece of paper. Some could be done mentally.

$1800 \div 6 = 300$

$3.5 \div 7 = 0.5$

$6372 \div 6 = 1062$

$210 \div 70 = 3$

$5.4 \div 9 = 0.6$

$7847 \div 7 = 1121$

$7200 \div 9 = 800$

$7.2 \div 6 = 1.2$

$9378 \div 9 = 1042$

$240 \div 60 = 4$

$4.9 \div 7 = 0.7$

$6985 \div 6 = 1164$

Workout B

Division Workout

$300 = 2100 \div 7$

$0.8 = 5.6 \div 7$

$702 = 4914 \div 7$

$6 = 360 \div 60$

$0.8 = 4.8 \div 6$

$908 = 5448 \div 6$

$600 = 4800 \div 8$

$0.8 = 6.4 \div 8$

$908r2 = 7266 \div 8$

$6 = 540 \div 90$

$0.8 = 7.2 \div 9$

$222 = 1998 \div 9$

Workout C

Division Workout

$1800 \div 9 = 200$

$4.2 \div 7 = 0.6$

$7526 \div 6 = 1254r2$

$240 \div 80 = 3$

$3.6 \div 9 = 0.4$

$8477 \div 7 = 1211$

$810 \div 90 = 9$

$3.6 \div 6 = 0.6$

$9398 \div 9 = 1044r2$

$420 \div 60 = 7$

$2.8 \div 7 = 0.4$

$8952 \div 6 = 1492$



Division Game

Workout D

You need:
1 - 6 dice

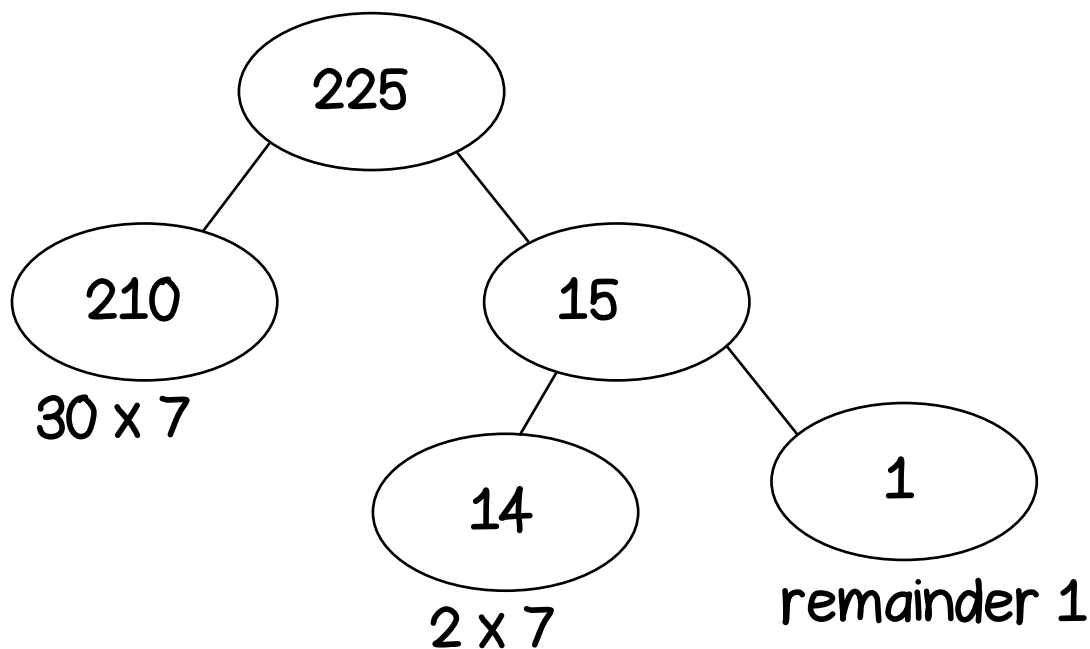
To play:

Player 1: Throw the dice three times and make a three-digit number.

Divide the number by seven by partitioning it.

You score the remainder.

For example: If you throw 2, 2 and 5 you calculate $225 \div 7$



So you score 1 because there was a remainder of 1

Player 2 now has their turn.

Play continues, adding your remainders to get an ongoing total.

To win:

The winner is the first player to get a total of more than 18



Missing Number Workout

Workout E

Find the missing digits.

Possible Solution

$$\boxed{2} \ 5 \ \boxed{3} \div 9 = \boxed{2} \ \boxed{8} \ r \ 1$$

Solve the calculation in seven different ways.

Find the missing digits in the following calculations.
Solve each one in several ways if possible.

Possible Solution

$$\begin{array}{r} 1 \ \boxed{5} \ 3 \ 1 \\ \hline \boxed{6} \ \boxed{9} \ \boxed{1} \ \boxed{8} \ 6 \end{array}$$

$$\begin{array}{r} 6 \ \boxed{3} \ 2 \\ \hline \boxed{7} \ \boxed{4} \ 4 \ \boxed{2} \ 4 \end{array}$$

Solve both calculations together using the digits 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.



Badges Workout

Workout F

Colin has between 2700 and 3000 badges to sell.
He tries putting them in different sized packs.

When he puts the badges in packs of 9 he gets one badge left over.

When he puts the badges in packs of 7 he gets three badges left over.

Possible Solutions

Investigate possible numbers of badges that Colin could have. 2719, 2782, 2845

What do you notice about the digit sum of all your answers? The digit sum is 19.

Is there a single digit pack size that would work exactly for your possible numbers of badges? No



Word Problem Workout

Workout G

Colin is having a dinner party.

There will be 6 guests plus Colin. He has 1.575kg of Caribou nuts.

Shared equally, how many grams of Caribou nuts can they have each? **225g**

Colin has taken up jogging.

He jogs 1056km in 6 months.

If he jogs the same distance each month, how far does he jog each month? **176km**

A chef buys crates of apples.

Each crate has 135 apples in it.

He buys 18 crates of apples. Each Apple Cake needs 9 apples.

How many apple cakes can he make? **270**

218 scouts go on a weekend camp.

Each tent can sleep 8 scouts.

How many tents do they need? **28**

Colin is jogging again! He is aiming to jog a total of 30km.

He does two sessions of 2.3km, and four sessions of 2.7km.

The remaining distance he does in five equal jogging sessions.

How far does he jog in each of those sessions? **2.92km**

Create your own problems for $2115 \div 9$



1 - 20 Workout

Workout H

Using the digits from today's date create all the numbers from 1 - 20. You can use any or all of the four operations. You must use all the digits every time.

Example: 03/4/20 (3rd April)

1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20

$$3 \times 4 = 12 \quad 2 + 0 = 2 \\ 12 + 2 = 14$$

$$3 + 4 - 2 + 0 = 5$$

$$3 + 4 + 2 + 0 = 9$$