## Colin and Coco's Daily Maths Workout

## Workout 3.1 \& 3.2

Answers


| $4 \times 5=20$ | $6 \times 5=30$ | $4 \times 3=12$ | $4 \times 12=48$ |
| :--- | :--- | :--- | :--- |
| $3 \times 9=27$ | $3 \times 8=24$ | $3 \times 7=21$ | $12 \times 3=36$ |
| $8 \times 4=32$ | $8 \times 9=72$ | $8 \times 6=48$ | $8 \times 12=96$ |
| $4 \times 6=24$ | $4 \times 7=28$ | $4 \times 4=16$ | $4 \times 11=44$ |

## Addition Workout 2

| 56 | $=4 \times 14$ | 72 | $=4 \times 18$ | 64 | $=4 \times 16$ | 68 | $=4 \times 17$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 84 | $=14 \times 6$ | 112 | $=14 \times 8$ | 45 | $=15 \times 3$ | 117 | $=13 \times 9$ |
| 48 | $=3 \times 16$ | 51 | $=3 \times 17$ | 54 | $=3 \times 18$ | 42 | $=3 \times 14$ |
| 104 | $=13 \times 8$ | 128 | $=16 \times 8$ | 152 | $=19 \times 8$ | 138 | $=17 \times 8$ |

## Addition Workout 3

$4 \times 32=128$
$3 \times 41=123$
$8 \times 31=248$
$4 \times 62=248$

$4 \times 64=256$
$3 \times 83=249$
$3 \times 74=222$
$8 \times 61=488$
$8 \times 36=288$
$3 \times 52=156$
$3 \times 74=222$

## Workout B

$42=3 \times 14$
$138=17 \times 8$

You need:
Counters (or you could colour the squares instead of putting counters on them if you like.)
Products of 3 Board (on the next page)

To play:
Every time it is your turn you cover two numbers on the board. One of your numbers multiplied by 3 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 $a 5$ and a 15 because $5 \times 3=15$
or you could choose to cover $a 7$ and a 21 because $7 \times 3=21$ and so on.

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

Choosing from the digits $3,4,6$ and 8 in any combinations, how close can you get to an answer of 265 ?
Try several possible calculations. You can use a digit twice in one calculation.
Possible Solution


Possible Solutions

Solve each calculation in at least two ways.
$4 \times 6=240$
8
3

| 2 |  |
| :---: | :---: |
| 4 | 0 <br> 0 |$\frac{$| 8 |
| :---: |
| 4 |}{}$=160$



| 3 | 0 |
| :---: | :---: |
| 4 | 0 | | 5 |
| :---: |



Colin has collection of cards with triangles and quadrilaterals on. He picks some cards and there are 48 sides in total.

How many of each type of shape might he have chosen?

What if the total number of sides was $60 ?$

| Triangles | Quadrialterals |
| :---: | :---: |
| 20 | 0 |
| 16 | 3 |
| 12 | 6 |
| 8 | 9 |
| 4 | 12 |
| 0 | 15 |


| Triangles | Quadrialterals |
| :---: | :---: |
| 0 | 12 |
| 4 | 9 |
| 8 | 6 |
| 12 | 3 |
| 16 | 0 |



If there were octagons in the collection too, how does that change the number of possible combinations?

There will be less as the number of sides of one octagon is twice the number of sides of one quadrilateral

Be careful - they are not all multiplication problems!

Colin is planting bulbs.
He plants 23 bulbs in each pot. There are 8 pots.
How many bulbs does he plant in total? 184

Colin has taken up jogging.
He jogs 8 km each day.
How far will he have jogged in 21 days? 168

Colin loves apples.
Each crate has 30 apples in it.
How many apples are there in 4 crates? 120

Coco has 48 sweets.
Coco has three times as many sweets as Colin.
How many sweets does Colin have? 16

Coco loves crackers. She buys 3 packs of crackers.
There are 16 crackers in each pack.
She eats 12 crackers.
How many crackers does she have left? 36

Create your own problems for $14 \times 3$

# Colin and Coco's Daily Maths Workout 

Workout 3.2

## Division



## Division Workout

$$
\begin{array}{llll}
18 \div 3=6 & 16 \div 4=4 & 16 \div 8=\boxed{2} & 36 \div 3=12 \\
24 \div 3=\boxed{ } & 24 \div 4=\boxed{ } & 24 \div 8=3 & 48 \div 4=12 \\
12 \div 3=4 & 12 \div 4=3 & 32 \div 8=4 & 96 \div 8=12 \\
27 \div 3=9 & 32 \div 4=8 & 56 \div 8=7 & 48 \div 8=6
\end{array}
$$

## Division Workout



$$
\begin{array}{llll}
\boxed{7}=21 \div 3 & \boxed{5}=20 \div 4 & \boxed{4}=32 \div 8 & \boxed{17}=51 \div 3 \\
\boxed{12}=36 \div 3 & \boxed{9}=36 \div 4 & \boxed{5}=40 \div 8 & \boxed{16}=64 \div 4 \\
16=48 \div 3 & 12=48 \div 4 & \boxed{12}=96 \div 8 & \boxed{13}=104 \div 8 \\
18=54 \div 3 & 14=56 \div 4 & 15=120 \div 8 & 19=57 \div 3
\end{array}
$$

## Division Workout



## Division Game

You need:
A Counter each
1-6 dice
What's Left? Board - 4s (included in this pack)

To play:
Take it in turns to throw the dice and move up the board.
Divide the number you land on by four.
You score the remainder.

For example: If you land on 21 you calculate $21 \div 4$
$4 \times 5=20$ so the result is 5 remainder 1
You would score 1 point.

To win:
The winner is the player with the highest score when the first player passes the finish.

Find the missing digits.

## Possible Solution

$$
2 \quad 2 \div 3=7 \mathrm{r} 1
$$

Solve the calculation in several different ways.

Find the missing digits in the following calcualtions. Solve each one in several ways.

$$
\begin{aligned}
& \boxed{3} \div 5=\boxed{6} r 2 \\
& \boxed{1}, \boxed{8} \div 4=4 r 2 \\
& 5 \quad 9 \div 8=7 r 3
\end{aligned}
$$

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

## Rabbit workout

Coco has some pet rabbits. She has fewer than 60 rabbits.

When she puts her rabbits in cages of 4 she gets one rabbit left over.
When she puts the same number of rabbits in cages of three she gets two left over.

Investigate possible numbers of rabbits that coco could have.
Possible Solutions
$5,17,29,41,53$

## Word Problem Workout

```
Be careful - they are not all division problems!
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Colin is planting 240 bulbs.
He plants the same number of bulbs in each pot. There are 8 pots.
How many bulbs does he plant in each pot? 30

Colin has taken up jogging.
He jogs a total of 54 km .
He jogs 3 km in each session.
How many jogging sessions has he done? 18

Colin loves apples. He has 270 apples.
Each crate has the same number of apples in it.
He has 3 crates. How many apples are in each crate? 90

Coco has 18 sweets.
Colin has three times as many sweets as Coco.
How many sweets does Colin have? 54

Coco loves crackers. She has 50 crackers.
She puts exactly 8 crackers on each plate, and eats the left over crackers. How many crackers does she eat? 2

Create your own problems for $48 \div 3$


