



# Keep-uppI Maths Workout



Year 3 - Pack 3

Answers



## KPIs for Term 3

Compare and order fractions with same numerator or same denominator

Add numbers with up to 3-digits using a formal written method

Subtract numbers with up to 3-digits using a formal written method

Choose efficient methods to add and subtract numbers up to 3-digits



## Addition and Subtraction Workout

Use a formal written method to solve these.

$$\begin{array}{r} 438 \\ + 142 \\ \hline 580 \end{array}$$

$$\begin{array}{r} 438 \\ - 171 \\ \hline 267 \end{array}$$

$$\begin{array}{r} 646 \\ - 378 \\ \hline 268 \end{array}$$

$$485 + 67$$

552

$$\begin{array}{r} 527 \\ + 281 \\ \hline 808 \end{array}$$

$$\begin{array}{r} 563 \\ - 282 \\ \hline 281 \end{array}$$

$$\begin{array}{r} 845 \\ - 556 \\ \hline 289 \end{array}$$

$$534 - 87$$

447

$$\begin{array}{r} 385 \\ + 371 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 753 \\ - 448 \\ \hline 305 \end{array}$$

$$\begin{array}{r} 258 \\ + 387 \\ \hline 645 \end{array}$$

## Fraction Workout

Insert &lt; or &gt; to make these true.

$$\frac{1}{2} > \frac{1}{3}$$

$$\frac{3}{4} > \frac{1}{4}$$

$$\frac{1}{4} < \frac{1}{3}$$

$$\frac{4}{5} > \frac{3}{5}$$

$$\frac{1}{5} > \frac{1}{8}$$

$$\frac{4}{5} > \frac{4}{8}$$

$$\frac{2}{3} > \frac{2}{5}$$

$$\frac{3}{8} < \frac{3}{5}$$

Put each set of fractions in order from smallest to largest.

$$\frac{1}{4} \quad \frac{1}{2} \quad \frac{1}{3}$$

$$\frac{1}{4} \quad \frac{1}{3} \quad \frac{1}{2}$$

$$\frac{3}{5} \quad \frac{3}{8} \quad \frac{3}{4}$$

$$\frac{3}{8} \quad \frac{3}{5} \quad \frac{3}{4}$$

$$\frac{3}{5} \quad \frac{4}{5} \quad \frac{2}{5}$$

$$\frac{2}{5} \quad \frac{3}{5} \quad \frac{4}{5}$$

$$\frac{1}{5} \quad \frac{1}{3} \quad \frac{1}{8}$$

$$\frac{1}{8} \quad \frac{1}{5} \quad \frac{1}{3}$$

## Addition and Subtraction Workout

In your head? With jottings? Written method?

$$537 + 99 = 636$$

$$458 - 80 = 378$$

$$357 + 199 = 556$$

$$637 = 736 - 99$$

$$689 = 486 + 203$$

$$111 = 607 - 496$$

$$69 + 437 = 506$$

$$804 - 777 = 27$$

$$286 + 675 = 961$$



# Adding and Subtracting Game

Workout D

You need:

Adding and Subtracting Game templates (see below for Game 1 and Game 2)

Card Set A (print off the cards) for each player.

Card Set B (print off the cards) for each player.

To play:

Pick Game Template 1 or Game Template 2

Each player shuffles Card Set A and picks four cards to create a 4-digit number on the template.

Each player shuffles Card Set B and picks a card.

It is placed on the Game Template to make a calculation.

Both players find the answer to their calculation using an efficient method.

To win:

The player who calculates the highest total wins a point.

The first player to get 10 points wins the Game.

## Game 1

$$\begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} + \begin{array}{|c|} \hline B \\ \hline \end{array}$$

## Game 2

$$\begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} - \begin{array}{|c|} \hline B \\ \hline \end{array}$$



## Adding and Subtracting Cards

### Set A

0

1

2

3

4

5

6

7

8

9

### Set B

99

199

202

19

80

136

90

8

247



# Missing Number Workout

Workout E

Put digits in the empty boxes so that the calculations are correct.

Complete them in several different ways.

Possible  
solution

$$\begin{array}{r} \boxed{1} \quad 5 \quad \boxed{8} \\ + \quad 1 \quad \boxed{6} \quad \boxed{7} \\ \hline \boxed{3} \quad 2 \quad 5 \end{array} \qquad \begin{array}{r} 6 \quad \boxed{4} \quad \boxed{2} \\ - \quad \boxed{5} \quad 3 \quad \boxed{9} \\ \hline 1 \quad \boxed{0} \quad 3 \end{array}$$

Are there any boxes that it is impossible to put a 2 in? Why?  
What about other impossible digits?

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

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



## Addition Challenge

Workout F

KeePuppI and Coco have been adding three digit numbers.



Whenever I add two three-digit numbers with a 4 and a 5 in the tens columns I get a 9 in the tens column in the answer.



Whenever I add two three-digit numbers with a 4 and a 5 in the tens columns I get a 0 in the tens column in the answer.

They have both been adding correctly!

Find four calculations that KeePuppI could have done.

Find four calculations that Coco could have done.

KeePuppI: numbers have ones that total 9 or less.

Coco: numbers have ones that total 10 or more.

What do you notice?

Write a sentence about KeePuppI's numbers.

Write a sentence about Coco's numbers.



Whenever I add two three-digit numbers with a 4 and a 5 in the tens columns I get something different in the tens column in the answer.

Do you agree with Colin?  
Explain your thinking.

Not possible - the tens will always total 9 or 10.



# Word Problem Workout

Workout G

1. Coco is playing darts. She starts from 301  
Her first three darts score 18, double 14 and double 20  
How much does she have left to score?  
215
2. Colin has saved £454  
He spends £276 on a computer game.  
How much does he have left?  
£178
3. There is a bag of 200 marbles.  
Coco and Colin each take 60 marbles out of the bag.  
How many marbles are left in the bag?  
80
4. Colin eats  $\frac{1}{4}$  of the cake. Coco eats  $\frac{1}{5}$  of the cake.  
Who eats the largest piece of cake?  
Colin
5. A new flag is being designed.  
 $\frac{1}{8}$  of the design is blue.  $\frac{4}{8}$  of the design is red.  $\frac{3}{8}$  of the design is white.  
Which colour is there most of?  
red
6. Colin goes on a road trip to visit some friends.  
He sets off from Cardiff and goes to London, 153 miles.  
Then he travels to Birmingham which is 118 miles.  
His trip back to Cardiff is 127 miles. How far does he travel altogether?  
398 miles

Create your own problems adding or subtracting 3-digit numbers.



## Matching Workout

Match the calculation to the answer.  
In your head? With jottings? Written method?  
Fill in the missing buddies.

Possible  
solution

$365 + 244$	$912$
$854 - 168$	$921$
$564 - 283$	$609$
$745 + 176$	$459$
$816 - 357$	$686$
$536 + 376$	$495$
$781 - 286$	$281$
$489 + 179$	$218$
$652 - 434$	$668$

Match the calculation to the answer.  
In your head? With jottings? Written method?  
Fill in the missing buddies.

Possible  
solution

$136 + 70$	$209$
$387 - 180$	$204$
$168 + 41$	$206$
$194 + 10$	$208$
$302 - 99$	$205$
$247 - 39$	$207$
$147 + 58$	$210$
$301 - 91$	$203$

Create your own Matching Workout.