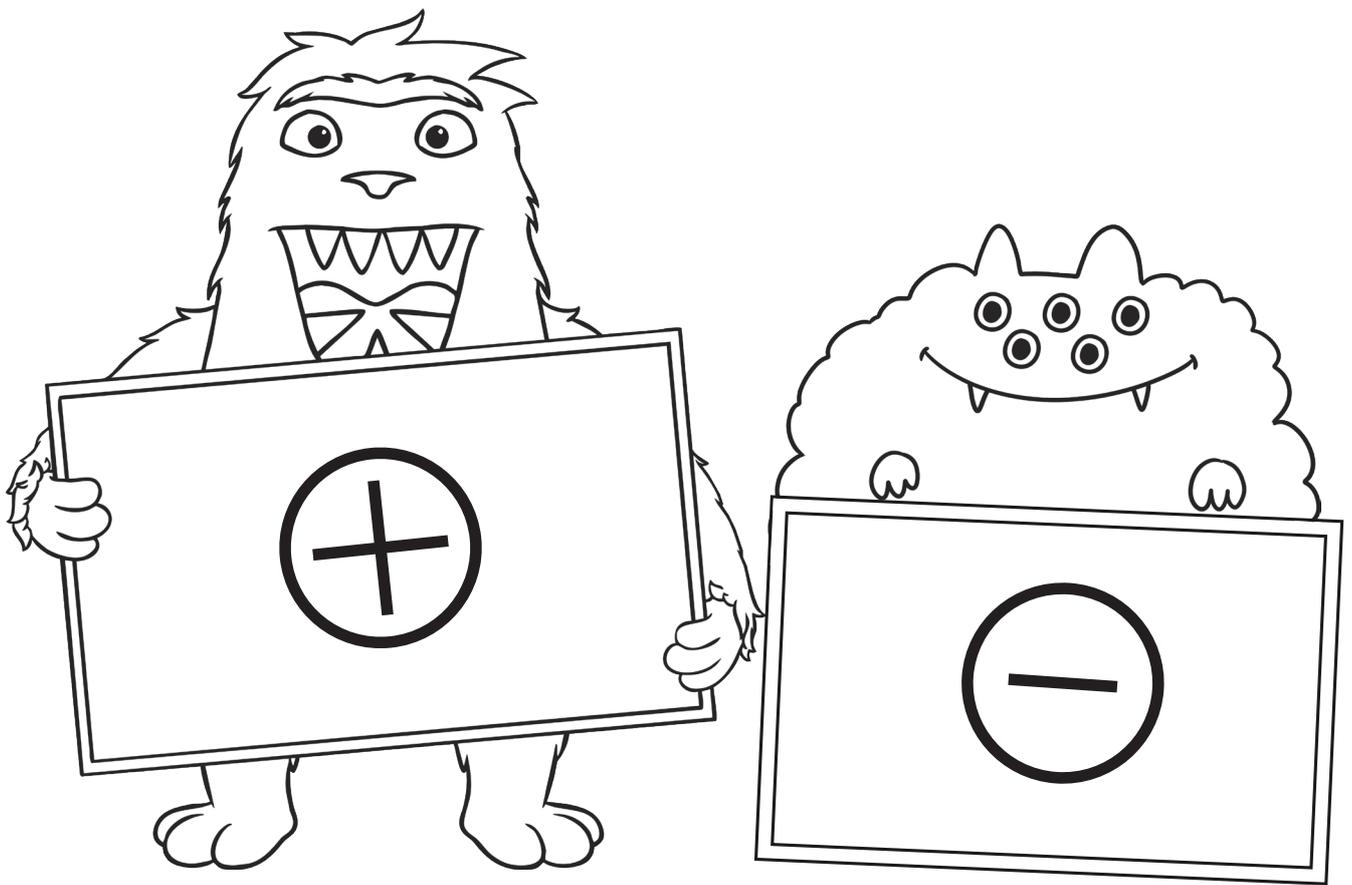# Year 4 Maths Addition and Subtraction Workbook

Year 4 Maths Addition and Subtraction Workbook

Year 4 Programme of Study – Addition and Subtraction

Statutory Requirements	Worksheet	Page Number	Notes
Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Large Numbers Addition Worksheet	3	
	Missing Number Three Digit Addition	4	
	Addition Pyramids Worksheet 2	5 - 7	
	Repeated Subtraction of a Factor	8	
	Find Missing Numbers in Column Subtraction Sums	9	
Estimate and use inverse operations to check answers to a calculation.	Estimate Answers Speed Challenge	10	
	Using Inverse Operations to check Addition and Subtraction Calculations	11	
Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Multi-step Problems Around the World Flights	12	
	Solving Two Step Addition and Subtraction Word Problems	13 - 14	

Large Numbers Addition Worksheet

a)
```
  5122
   120
+  309
_____
```

b)
```
   440
  3055
+  123
_____
```

c)
```
  9999
   381
+  222
_____
```

d)
```
    79
   927
+ 3748
_____
```

e)
```
  2378
   592
+   92
_____
```

f)
```
  2849
    81
+  317
_____
```

g)
```
    62
  5916
+  126
_____
```

h)
```
  5783
  3956
+  276
_____
```

i)
```
  3769
   277
+ 3358
_____
```

j)
```
    46
  6928
    94
+  197
_____
```

k)
```
  4924
  9376
   384
+   37
_____
```

l)
```
  9476
    83
   846
+ 6254
_____
```

m)
```
   495
  8372
    86
+ 2652
_____
```

n)
```
  8278
  6970
   384
+   93
_____
```

o)
```
   844
  9243
   393
+   23
_____
```

p)
```
   765
  6937
   926
+ 2857
_____
```

q)
```
  6847
   946
   855
+   21
_____
```

r)
```
   846
    54
   365
+ 2395
_____
```

Missing Number 3-Digit Addition

Calculate the missing numbers in these calculations.

```
1)              2)              3)              4)              5)
   _ 3 8          1 _ 9          2 7 _           _ 7 7          8 _ 6
 + 4 _ 7        + _ 8 _        + 8 _ 8         + 6 _ 2        + _ 4 4
 ---------      ---------      ---------       ---------      ---------
 1 2 8 _          5 2 4        _ _ 5 2         1 5 4 _        1 2 9 _
```

```
6)              7)              8)              9)              10)
   _ 8 9          3 7 _           _ 3 1          1 _ 2           _ 8 8
 + 2 _ 1        + 7 _ 3         + 9 6 _        + _ 6 9        + 3 5 _
 ---------      ---------       ---------      ---------      ---------
   4 5 _        _ _ 3 6         1 0 _ 2        1 1 5 _          7 _ 7
```

```
11)             12)             13)             14)             15)
   _ _ 2          9 _ 7          9 _ _           9 _ 0          8 _ 8
 + 6 2 _        + _ 6 _        + _ 3 1         + 3 1 _        + _ 2 _
 ---------      ---------      ---------       ---------      ---------
 1 3 4 1        1 2 9 4        1 8 5 7         _ _ 1 8        1 5 0 5
```

```
16)             17)             18)             19)             20)
   9 1 _          5 _ 0          6 _ _           _ 0 9          1 _ 5
 + 3 _ 5        + _ 8 3        + _ 4 5         + 7 _ _        + _ 3 6
 ---------      ---------      ---------       ---------      ---------
 _ _ 2 4        1 4 0 _        1 6 0 8           9 8 9          8 5 _
```

```
21)             22)             23)             24)             25)
   _ 5 1          5 3 _          7 0 _           6 4 _          3 _ 9
 + 5 _ 1        + 8 _ 9        + 1 _ 5         + 5 _ 8        + _ 7 _
 ---------      ---------      ---------       ---------      ---------
 _ 7 2          _ _ 7 9        _ 8 8           _ _ 8 2        1 0 3 2
```

```
26)             27)             28)             29)             30)
   9 _ 8          3 _ 2          9 _ 1           _ 9 7          4 3 4
 + _ 4 1        + _ 2 _        + _ 2 8         + 5 _ 1        + 8 _ _
 ---------      ---------      ---------       ---------      ---------
 1 7 6 _        5 7 7          1 6 3 _         7 6 _          _ _ 5 8
```

Addition Pyramids Worksheet 1

Use addition and subtraction calculations to complete these pyramids. The first one has been done for you.

1)

	120	
50	30	40

2)

	210	
100	110	
60		70

3)

	250	
140	110	
	60	50

4)

270		
	150	
30	90	

5)

170		
	50	30

6)

450		
	200	
120		

7)

270		
	50	130

8)

200		
	95	
35		

9)

290		
	155	
	70	

10)

	125	
125	70	

11)

540		
255	70	

12)

85	175	60
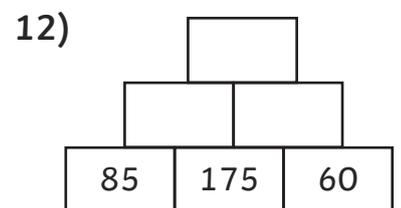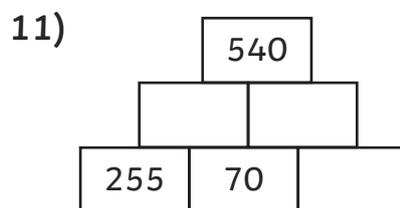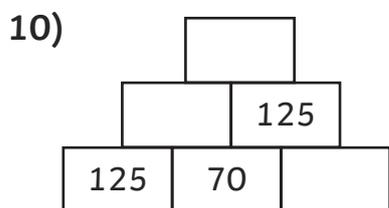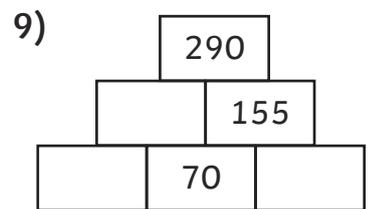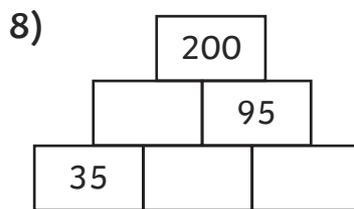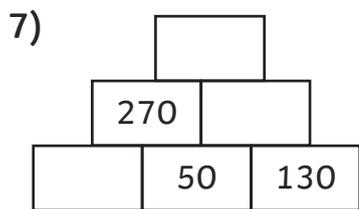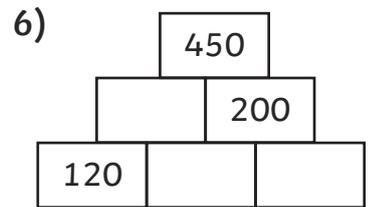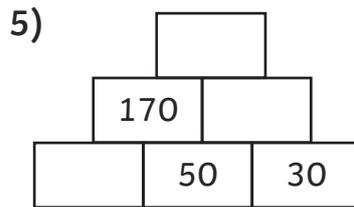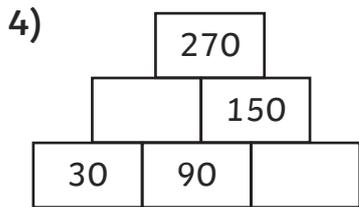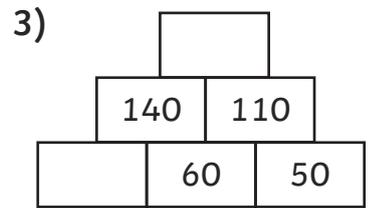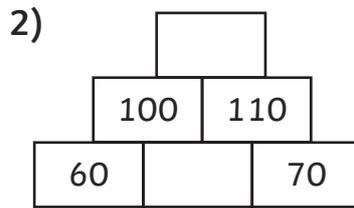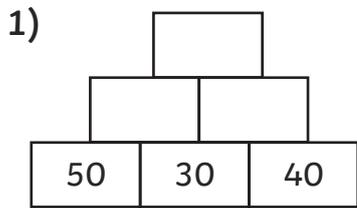
Addition Pyramids Worksheet 2

Use addition and subtraction calculations to complete these pyramids. The first one has been done for you.

1)

```
      [    ]
   [    ] 395
 320  150  [  ]
```

2)

```
      [    ]
   340  [    ]
 210  [  ] 315
```

3)

```
      815
   [    ] [    ]
 105  265  [  ]
```

4)

```
      [    ]
   340  375
 205  135  [  ]
```

5)

```
      810
   [    ] 345
 [  ] 120  [  ]
```

6)

```
      899
   595  [    ]
 [  ] 280  [  ]
```

7)

```
      [    ]
   [    ] 635
 440  [  ] 260
```

8)

```
      [    ]
   [    ] 415
 710  135  [  ]
```

9)

```
      1590
   [    ] 635
 580  [  ] [  ]
```

10)

```
      1900
   835  [    ]
 365  470  [  ]
```

11)

```
      [    ]
   755  [    ]
 [  ] 180  435
```

12)

```
      [    ]
   1345 1155
 [  ] 380  [  ]
```
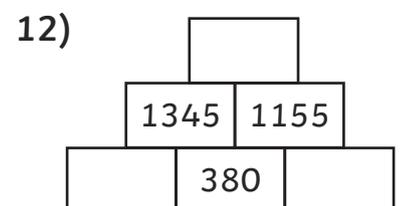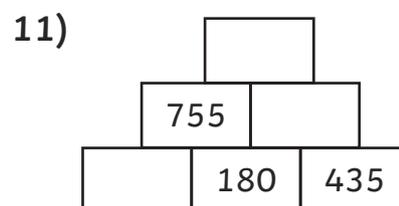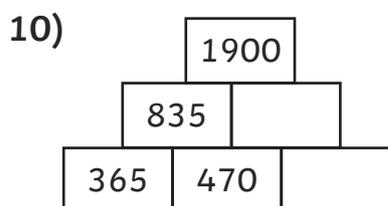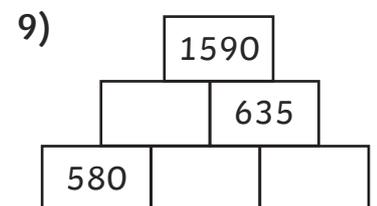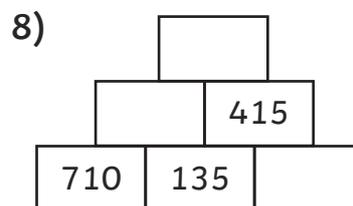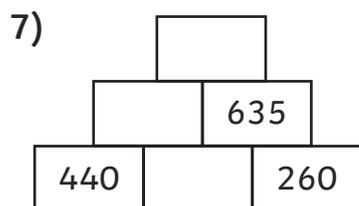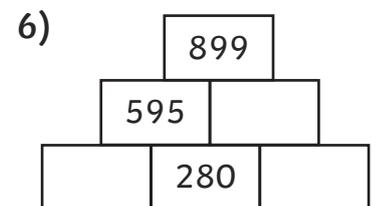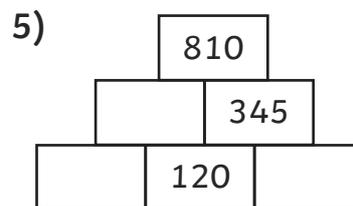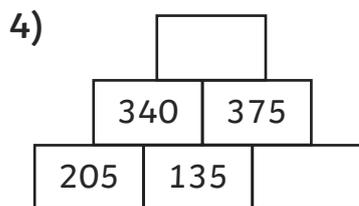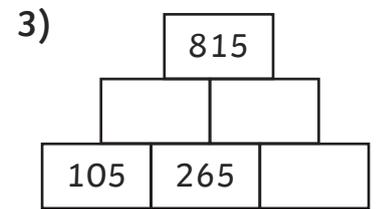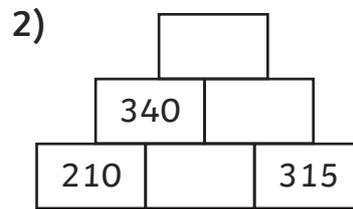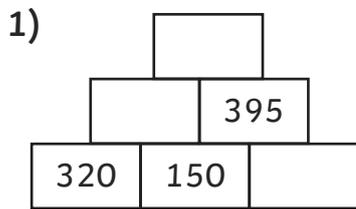
Addition Pyramids Worksheet 3

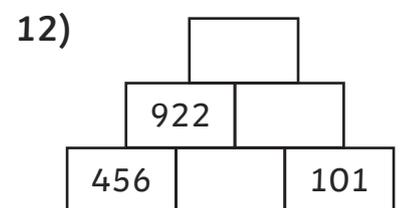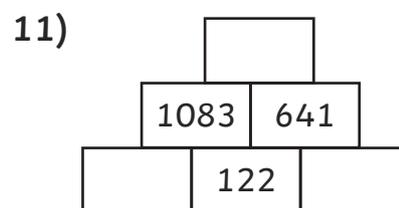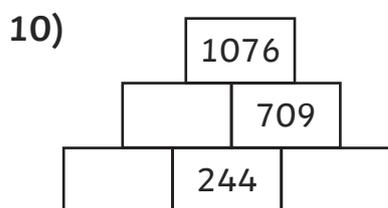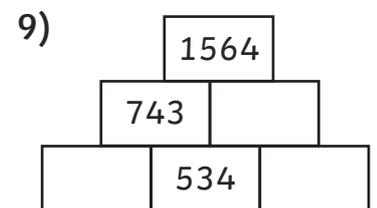Use addition and subtraction calculations to complete these pyramids. The first one has been done for you.

1)
```
        1319
     681    683
  254    427    211
```

2)
```
        [   ]
     442    [   ]
  400    42    178
```

3)
```
        [   ]
     655    233
  [   ]    43    [   ]
```

4)
```
        [   ]
     231    752
  [   ]    37    [   ]
```

5)
```
        [   ]
     [   ]    389
  199    [   ]    211
```

6)
```
        899
     610    [   ]
  [   ]    111    [   ]
```

7)
```
        [   ]
     [   ]    325
  37    [   ]    209
```

8)
```
        797
     [   ]    [   ]
  [   ]    273    113
```

9)
```
        1564
     743    [   ]
  [   ]    534    [   ]
```

10)
```
        1076
     [   ]    709
  [   ]    244    [   ]
```

11)
```
        [   ]
     1083    641
  [   ]    122    [   ]
```

12)
```
        [   ]
     [   ]    922
  456    [   ]    101
```
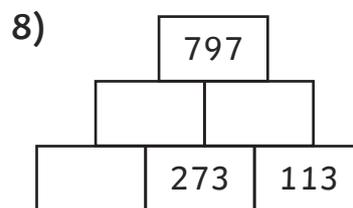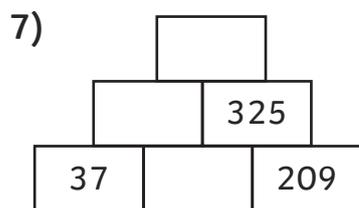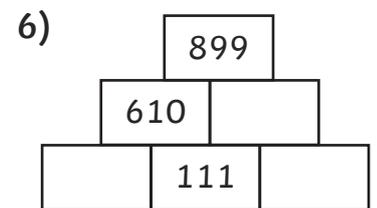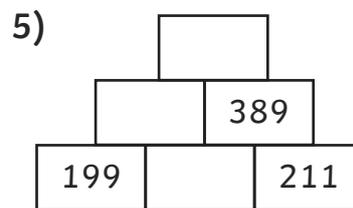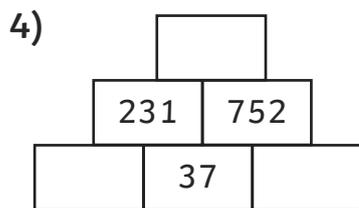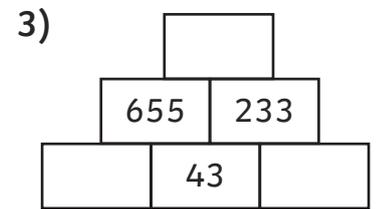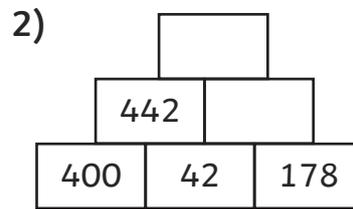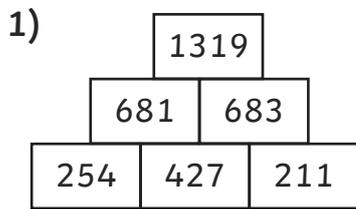
Repeated Subtraction of a Factor

The numbers on the left in circles are multiples of the number on the right in boxes –
keep subtracting the number in the boxes until you reach 'O'. If you don't reach 0, check your
answers to find out where you went wrong. You may need to jot some calculations down.

e.g.

(64) [- 16] (48) [- 16] (32) [- 16] (16) [- 16] (0) [- 16]

(136) [- 34] ( ) [- 34] ( ) [- 34] ( ) [- 34] ( ) [34]

(588) [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( ) [147]

(1488) [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( ) [362]

(1716) [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( ) [429]

(5704) [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( ) [1426]

Finding Missing Numbers in Column Subtraction Calculations

Use these digit cards just once to fill all of the gaps in the calculations.

$$\boxed{0}\ \boxed{1}\ \boxed{2}\ \boxed{3}\ \boxed{4}\ \boxed{5}\ \boxed{6}\ \boxed{7}\ \boxed{8}\ \boxed{9}$$
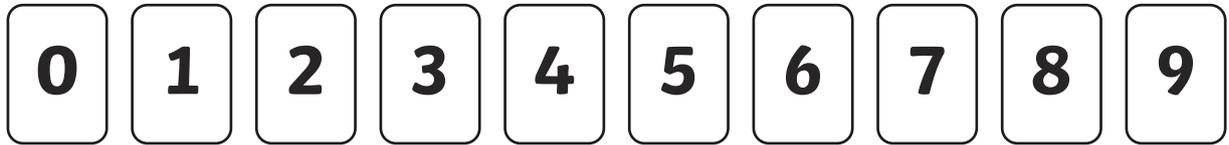
$\begin{array}{r} 657 \\ -\ 359 \\ \hline 29\square \end{array}$	$\begin{array}{r} \square3\square \\ -\ 452 \\ \hline 284 \end{array}$	$\begin{array}{r} 871 \\ -\ 199 \\ \hline 67\square \end{array}$
$\begin{array}{r} 91\square \\ -\ 878 \\ \hline 41 \end{array}$	$\begin{array}{r} 1\square69 \\ -\ 275 \\ \hline 1094 \end{array}$	$\begin{array}{r} 2612 \\ -\ 17\square8 \\ \hline 854 \end{array}$
$\begin{array}{r} 3269 \\ -\ 1652 \\ \hline \square617 \end{array}$	$\begin{array}{r} 5\square12 \\ -\ 693 \\ \hline 4719 \end{array}$	$\begin{array}{r} 8\square08 \\ -\ 4782 \\ \hline 3226 \end{array}$

Estimate Answers Speed Challenge

How many points can you score on the speed challenge? Set up a countdown timer for your chosen time limit and use your rounding skills to estimate the answers to as many questions as you can. When the time is up, check that your answers were in the allowable range. Score 1 point for each accurate estimate from list 1, 2 points from list 2, 3 points for list 3 and 4 points for list 4.
No extra points for fully correct answers!
Good luck!

List 1	Estimate	List 2	Estimate	List 3	Estimate	List 4	Estimate
17+39		43+128		123+104		1523+1026	
21+48		17+162		136+153		1789+2391	
33+59		29+194		178+329		3456+4567	
39+42		34+208		346+252		4028+3876	
58+78		67+254		276+217		5997 + 4302	
29+83		89+287		302+386		4808 + 3007	
44+99		98+355		457+342		4512 + 5490	
77+89		17+578		489+512		7 + 5674	
87+92		85+475		299+992		2987 + 7561	
98+97		78+967		342+876		4813 + 8564	
Points:							

Using Inverse Operations to Check Addition and Subtraction Calculations

Check the answers to these calculations using the inverse operation and mark them right or wrong!

	Calculation	Check with Inverse	Correct?
e.g.	5 5 7 - 2 7 8 work backwards! 2 7 7	277 + 278 = 555	Wrong!
1.	8 7 + 4 4 6 4 5 9		
2.	1 4 4 - 7 5 6 9		
3.	3 6 7 + 4 5 9 8 2 6		
4.	6 7 4 - 5 9 6 1 8 2		
5.	2 8 6 + 1 3 7 8 1 6 6 2		
6.	1 3 4 2 - 4 7 8 9 4 2		
7.	2 7 8 6 + 1 5 1 2 4 2 9 9		
8.	2 4 5 7 - 1 6 8 7 7 7 0		

Around the World Flights

1. If Kim flies from New York to Cairo via London, how much change will she get from £1000?

2. Taj wants to fly from London to Sydney via Tokyo. How much will he save if he flies direct to Sydney?

3. For business class flights the price increases by £200 per flight. How much would it cost Joy to fly business class from London to Tokyo? How much change would she get from £1000?

4. Fernando lives in Buenos Aires and wants to go on holiday to Tokyo. Which would be the cheapest route for him to take?

5. Mirai wants to get from New York to Tokyo. What is the cheapest route for her to take?

6. Richard lives in London. He wants to visit Cairo and New York and return home. He only has £1500. Can he do it and if so how much will he have left?

Solving Two Step Addition and Subtraction Word Problems

No.	Question	Calculation required (Do brackets first!)	Method		Answer
e.g.	The cinema has 700 seats. 113 adults and 276 children come to see the film. How many empty seats are there?	700 - (113 + 276)	1 1 3 + 2 7 6 3 8 9	6 9 7̶ 10̶ 10̶ - 3 8 9 3 1 1	311 seats are empty.
1.	Dorothy is saving her money for a new bike costing £286. If she has already saved £39 and is then given £59 for her birthday, how much more does she need to save?				
2.	A study of 900 people found that 687 were right handed, 174 were left handed and the remainder were ambidextrous (could use either hand). How many were ambidextrous?				

No.	Question	Calculation required (Do brackets first!)	Method			Answer
3.	The crisp factory needs to make 875 bags an hour. If a machine breaks down and the factory only makes 323 bags in one hour, how many does it need to make in the next hour to catch up?					
4.	Dave earns £1485 a month as a bus driver and his wife earns £1760 as a teacher. If Dave gets a pay rise of £217 a month how much less than his wife does he earn?					
5.	If William Shakespeare was born in 1564 and lived to be 52 years old, how many years ago did he die?					