

Vocabulary

ADDITION

add
plus
and
total



increase
more
sum
together

SUBTRACTION


take away
minus
less
reduce
remain



take from
fewer
take
difference
how many more

Videos to further explain each of the methods used in the following lessons can be found at:

<https://whiterosemaths.com/homelearning/year-5/week-4/>

Date	
Subject/s	Maths
Learning Objective 	To recall and use multiplication and division facts

1) $7 \times 2 = \underline{\quad}$

2) $3 \times 8 = \underline{\quad}$

3) $4 \times 6 = \underline{\quad}$

4) $2 \times 9 = \underline{\quad}$

5) $6 \times 4 = \underline{\quad}$

6) $8 \times 4 = \underline{\quad}$

7) $7 \times 5 = \underline{\quad}$

8) $9 \times 10 = \underline{\quad}$

9) $6 \times 6 = \underline{\quad}$

1) $6 \times \underline{\quad} = 18$

2) $8 \times \underline{\quad} = 16$

3) $\underline{\quad} \times 7 = 7$

4) $\underline{\quad} \times 9 = 45$

5) $7 \times \underline{\quad} = 21$

6) $\underline{\quad} \times 6 = 36$

7) $\underline{\quad} \times 8 = 40$

8) $9 \times \underline{\quad} = 90$

9) $\underline{\quad} \times 8 = 32$

10) $\underline{\quad} \times 6 = 24$

11) $7 \times \underline{\quad} = 63$

12) $\underline{\quad} \times 6 = 0$

13) $\underline{\quad} \times 8 = 80$

14) $9 \times \underline{\quad} = 54$

15) $6 \times \underline{\quad} = 42$

16) $\underline{\quad} \times 8 = 56$

17) $\underline{\quad} \times 9 = 81$

18) $6 \times \underline{\quad} = 30$

19) $8 \times \underline{\quad} = 48$

20) $\underline{\quad} \times 9 = 18$

21) $8 \times 6 = \underline{\quad}$

22) $7 \times 9 = \underline{\quad}$

23) $6 \times 7 = \underline{\quad}$

24) $8 \times 8 = \underline{\quad}$

25) $6 \times 3 = \underline{\quad}$

26) $9 \times 6 = \underline{\quad}$

27) $7 \times 5 = \underline{\quad}$

28) $8 \times 9 = \underline{\quad}$

29) $10 \times 7 = \underline{\quad}$

21) $\underline{\quad} \times 7 = 49$

22) $8 \times \underline{\quad} = 72$

23) $\underline{\quad} \times 6 = 48$

24) $9 \times \underline{\quad} = 45$

25) $\underline{\quad} \times 7 = 63$

26) $6 \times \underline{\quad} = 36$

27) $8 \times \underline{\quad} = 64$

28) $\underline{\quad} \times 6 = 42$

29) $\underline{\quad} \times 9 = 72$

30) $7 \times \underline{\quad} = 56$

31) $\underline{\quad} \times 8 = 48$

32) $6 \times \underline{\quad} = 60$

33) $9 \times \underline{\quad} = 45$

34) $\underline{\quad} \times 8 = 72$

35) $\underline{\quad} \times 7 = 28$

36) $9 \times \underline{\quad} = 81$


37) $\underline{\quad} \times 6 = 6$



38) $\underline{\quad} \times 8 = 64$


39) $7 \times \underline{\quad} = 49$

40) $\underline{\quad} \times 9 = 54$

Steps to Success

Date	
Subject/s	<u>Maths</u>
Learning Objective 	To add numbers with four or more digits.

SA 	TA 
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Success Criteria 	I can use place value columns to set out calculation				
	I understand when to exchange				
	I can use number bonds to add efficiently				
Support	Independent	Adult Support ()	Group Work		

Pre-task:

Calculate $7084 + 9118$

Calculate $87623 + 3789$

Th	H	T	O
5	3	4	5
3	4	5	7

Th	H	T	O
5	3	4	5
3	4	5	7

Th	H	T	O
5	3	4	5
3	4	5	7

Th	H	T	O
5	3	4	5
3	4	5	7

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		1	

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		2	

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		1	

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		2	

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		1	

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		0	2

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		1	

Th	H	T	O
5	3	4	5
3	4	5	7
			2
		0	2
8	8	0	2

Here you can see the column method alongside place value counters.

Can you spot which columns we will need to make an exchange from?

First, I can see that the ones column shows $5 + 7$. This will make a total greater than 9 so I will need to exchange.

You can see the exchange recorded here—the ones have been written in the ones column and the exchange is written just under the tens column next to it.

Now look at the tens column, you can see, that when I add in the exchange I now have $4 + 5 + 1 = 10$, so I will need to exchange again.

You can see it recorded here.

Now I just need to add the remaining columns. They both total less than 9 so no more exchanges are needed.

Fluency

Complete these on the squared paper on the next page

$$3451 + 5432 = \underline{\hspace{2cm}}$$

$$1763 + 4342 = \underline{\hspace{2cm}}$$

$$1812 + 5231 = \underline{\hspace{2cm}}$$

$$1083 + 2155 = \underline{\hspace{2cm}}$$

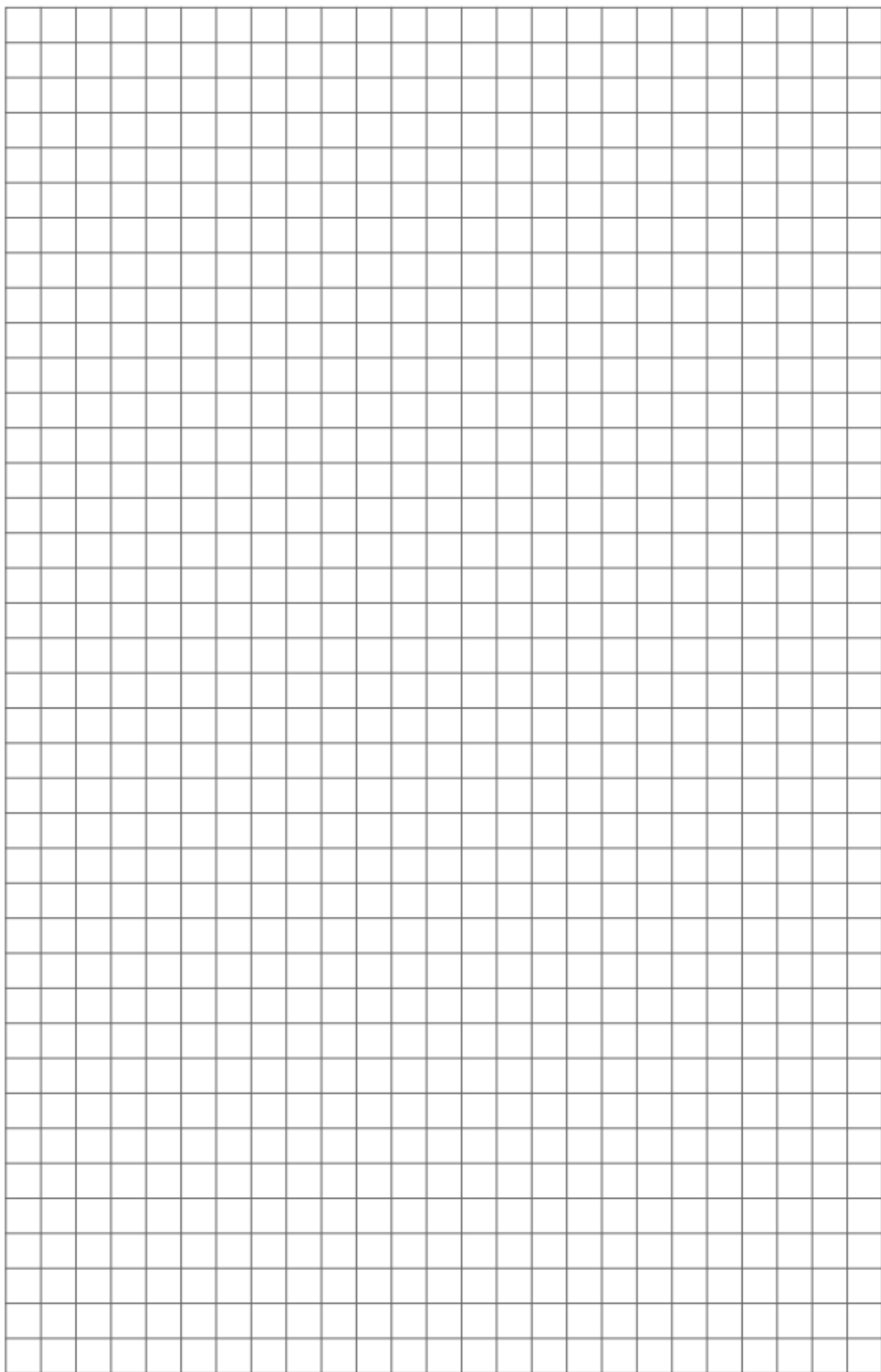
$$3321 + 7238 = \underline{\hspace{2cm}}$$

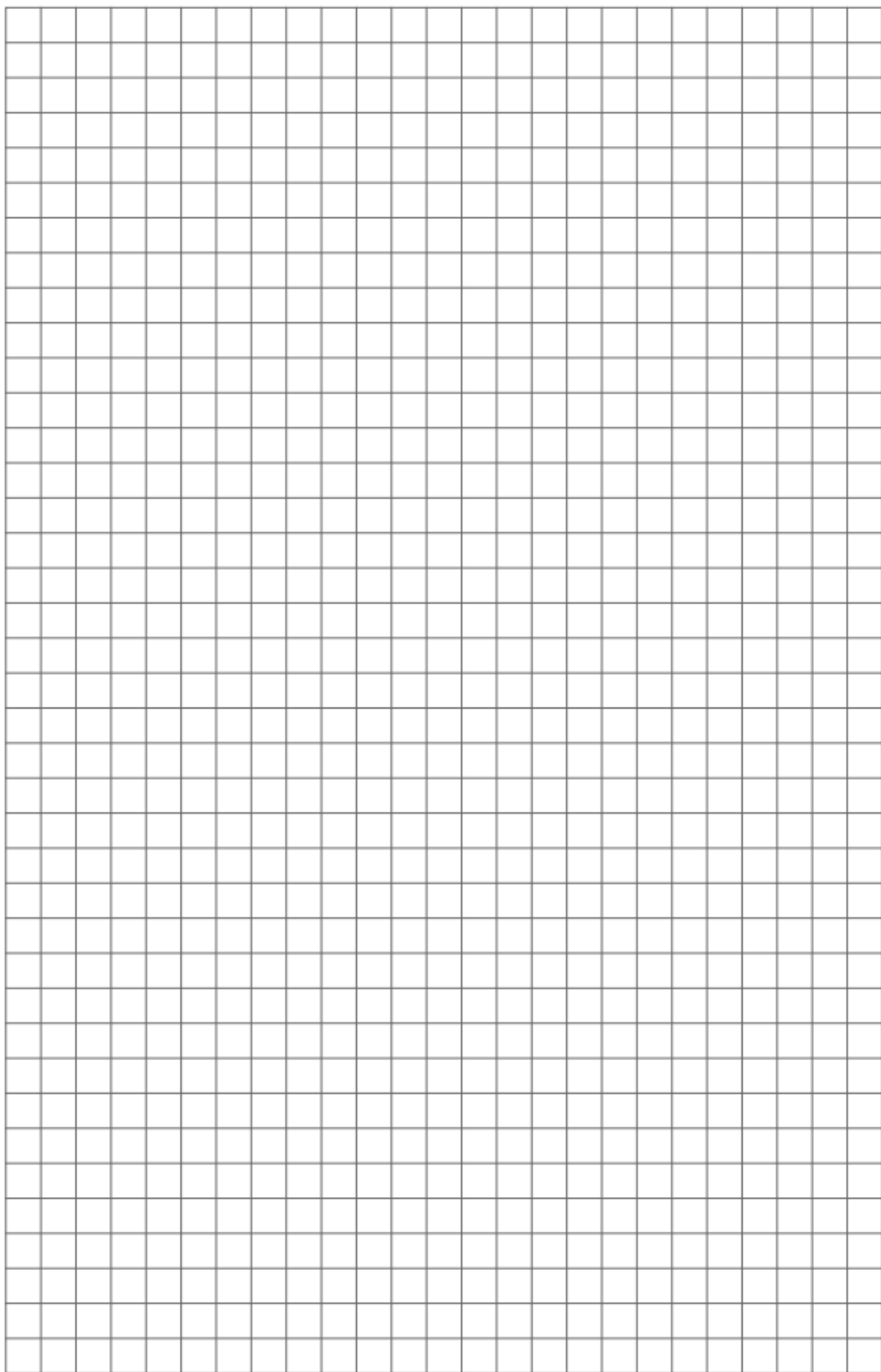
$$7667 + 4715 = \underline{\hspace{2cm}}$$

$$1902 + 4873 = \underline{\hspace{2cm}}$$

$$1099 + 2137 = \underline{\hspace{2cm}}$$

$$2561 + 6273 = \underline{\hspace{2cm}}$$





Fluency answers

$$3451 + 5432 = \underline{\mathbf{8883}}$$

$$1763 + 4342 = \underline{\mathbf{6105}}$$

$$1812 + 5231 = \underline{\mathbf{7043}}$$

$$1083 + 2155 = \underline{\mathbf{3238}}$$

$$3321 + 7238 = \underline{\mathbf{10559}}$$

$$7667 + 4715 = \underline{\mathbf{12382}}$$

$$1902 + 4873 = \underline{\mathbf{6775}}$$

$$1099 + 2137 = \underline{\mathbf{3236}}$$

$$2561 + 6273 = \underline{\mathbf{8834}}$$

Problem Solving and Reasoning

Five children have been playing a times tables game.
Here are their scores:



Lottie	Sam	Izzy	Abdul	Ffion
32 357	30 541	34 057	31 647	33 587

- a) Which two children have a combined score of exactly 62 188?
- b) Which two children have a combined score of exactly 65 944?

Use it!



Annie, Mo and Alex are working out the solution to the calculation $6,374 + 2,823$

Annie's Strategy

$$6,000 + 2,000 = 8,000$$

$$300 + 800 = 1100$$

$$70 + 20 = 90$$

$$4 + 3 = 7$$

$$8,000 + 1100 + 90 + 7 = 9,207$$

Explain it!



Mo's Strategy

	6	3	7	4
+	2	8	2	3
	8	1	9	7

Alex's Strategy

	6	3	7	4
+	2	8	2	3
				7
			9	0
	1	1	0	0
	8	0	0	0
	9	1	9	7

Who is correct?

Complete:

	Th	H	T	O
	6	?	?	8
+	?	?	8	?
	9	3	2	5

Mo says that there is more than one possible answer for the missing numbers in the hundreds column.

Is he correct?

Explain your answer.

Explain it!



Problem Solving and Reasoning - Answers

Use it!

Explain it!

- a) *Abdul and Sam*
- b) *Lottie and Ffion*

Alex is correct with 9,197

Annie has miscalculated $300 + 800$, forgetting to exchange a ten hundreds to make a thousand (showing 11 tens instead of 11 hundreds).

Mo has forgotten both to show and to add on the exchanged thousand.

The solution shows the missing numbers for the ones, tens and thousands columns.

$$6_38 + 2_87$$

Mo is correct. The missing numbers in the hundreds column must total 1,200 (the additional 100 has been exchanged).

Possible answers include:
 $6,338 + 2,987$
 $6,438 + 2,887$


Further Challengee

Rank by difficulty

$$2996 + 1650$$

$$3461 + 2537$$

$$4837 + 2189$$

Date	
Subject/s	Maths
Learning Objective 	To recall and use multiplication and division facts

$3 \times 4 =$

$7 \times 8 =$

$9 \div 3 =$

$36 \div 12 =$

$21 \div 7 =$

$8 \times 6 =$

$12 \times 4 =$

$10 \times 8 =$

$4 \times 8 =$

$3 \times 9 =$

$4 \times 7 =$

$3 \times 11 =$

$40 \div 8 =$

$15 \div 3 =$

$27 \div 9 =$

$20 \div 4 =$

$4 \times 11 =$

$48 \div 6 =$

$8 \div 4 =$

$6 \times 8 =$

$5 \times 8 =$

$11 \times 3 =$

$5 \times 8 =$

$80 \div 10 =$

$24 \div 4 =$

$88 \div 11 =$

$24 \div 3 =$

$4 \times 1 =$

$72 \div 8 =$

$8 \times 4 =$

$9 \times 4 =$

$8 \times 5 =$

$10 \times 3 =$

$16 \div 4 =$

$8 \times 11 =$

$6 \times 4 =$

$5 \times 4 =$

$32 \div 8 =$

$6 \div 3 =$

$3 \div 3 =$

$12 \div 3 =$

$3 \times 6 =$

$48 \div 12 =$

$44 \div 11 =$

$4 \times 9 =$

$8 \div 8 =$

$3 \times 4 =$

$7 \times 3 =$

$11 \times 8 =$

$4 \times 3 =$

$0 \times 8 =$

$12 \times 8 =$

$3 \times 12 =$

$48 \div 8 =$

$18 \div 3 =$

$28 \div 4 =$

$24 \div 8 =$

$30 \div 10 =$

$3 \times 3 =$

$56 \div 7 =$

$27 \div 3 =$

$8 \times 9 =$

$64 \div 8 =$

$4 \times 12 =$

$7 \times 4 =$

$10 \times 4 =$

$36 \div 4 =$

$5 \times 3 =$

$36 \div 9 =$

$16 \div 8 =$

$8 \times 8 =$

$56 \div 7 =$

$56 \div 8 =$

$8 \times 3 =$

$21 \div 3 =$

$4 \times 6 =$

$3 \times 0 =$

$72 \div 9 =$

$4 \times 12 =$

$32 \div 4 =$

$12 \div 4 =$

$3 \times 8 =$

$96 \div 12 =$

$12 \times 3 =$

$33 \div 3 =$

$4 \times 4 =$

$24 \div 8 =$

$7 \times 8 =$

$6 \times 3 =$

$9 \times 8 =$

$2 \times 3 =$

$9 \times 3 =$

$40 \div 4 =$

$4 \div 4 =$

$11 \times 4 =$

$21 \div 3 =$


$28 \div 7 =$




$3 \times 7 =$

$32 \div 8 =$

$8 \times 12 =$

Steps to Success

Date	
Subject/s	Maths
Learning Objective 	To add numbers with four or more digits - continued

		SA 	TA 
Success Criteria 	I can use place value columns to set out calculation		
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Teacher Led

Remember that it is important to line the digits up—look at this example, they will get the wrong answer because they've written three hundred and seventeen as thirty-one thousand, seven hundred. It can help to say the numbers out loud.

Here is how it should be set out.

TTh	Th	H	T	O
2	2	0	5	6
+	3	1	7	
<hr/>				

TTh	Th	H	T	O
2	2	0	5	6
+		3	1	7
<hr/>				
2	2	3	7	3

Don't forget to add your exchanges—can you spot the mistake in this one?

TTh	Th	H	T	O
	7	2	4	0
+	2	8	1	9
<hr/>				
	9	0	5	9

Well done—the thousands column should add to 10, so needs to be exchanged.

Here is the correct solution.

TTh	Th	H	T	O
	7	2	4	0
+	2	8	1	9
<hr/>				
1	0	0	5	9
1 1				

Look at this example—you can follow the same method, even if there are more than two numbers to add!

TTh	Th	H	T	O
6	3	0	7	0
	7	6	0	0
+		5	8	2
<hr/>				
7	1	2	5	2
1 1 1				

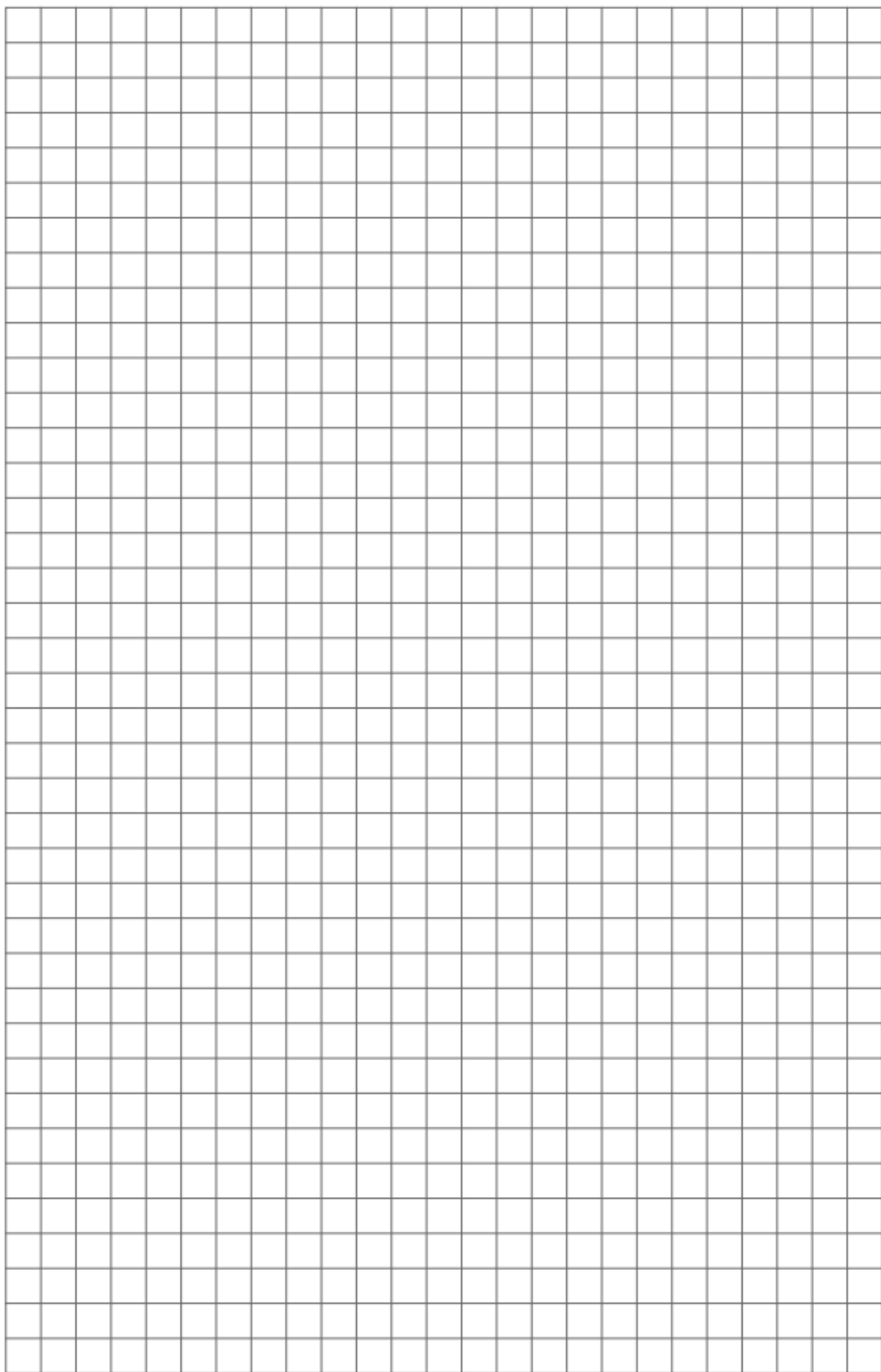
Fluency

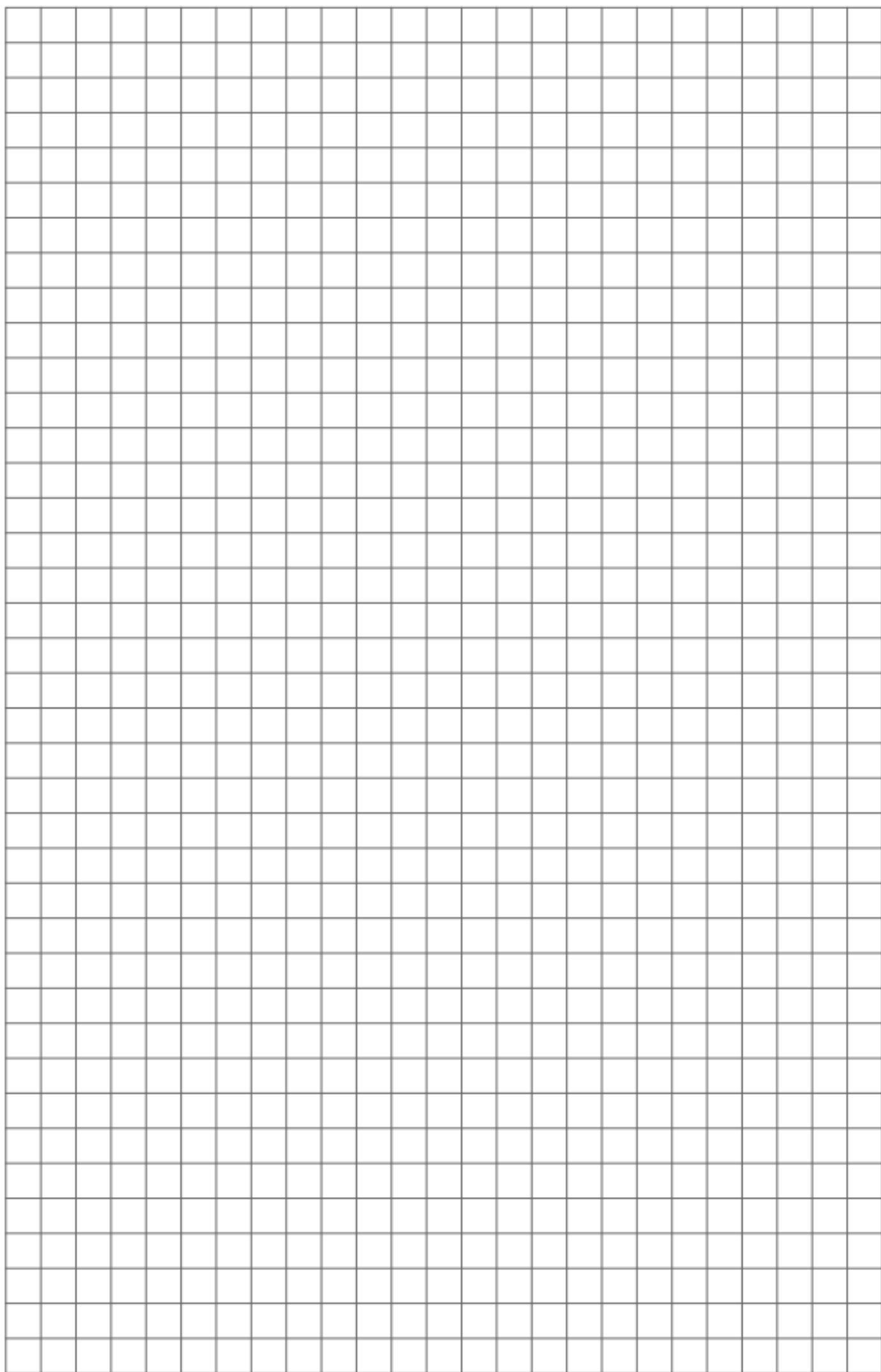
Use the square paper on the next page to work out your answers.

Find the total number of website hits on each day.

Day of the week	am	pm	Total number of hits
Sunday	36,432	57,478	
Monday	19,758	24,642	
Tuesday	21,427	32,846	
Wednesday	16,375	25,342	
Thursday	18,631	26,492	
Friday	17,563	42,869	
Saturday	33,642	58,567	

Now add the total hits for the days from Monday to Friday.





Fluency—Answers

Sunday $36,432 + 57,478 = 93,910$

Monday $19,758 + 24,642 = 44,400$

Tuesday $21,427 + 32,846 = 54,273$

Wednesday $16,375 + 25,342 = 41,717$

Thursday $18,631 + 26,492 = 45,123$

Friday $17,563 + 42,869 = 60,432$

Saturday $33,642 + 58,567 = 92,209$

Monday to Friday =

$$44400 + 54273 + 41717 + 45123 + 60432 = 245945$$

Problem Solving and Reasoning - Answers



$$54,937 + 23,592 \\ = 78,529$$



He moved the counter on the thousands row, he moved it from 4,000 to 7,000

Further Challenge

How many ways?

Complete using digits 1-9. Use the 7 as shown.

$$\square \mathbf{7} \square = \square + \square + \square + \square$$

Level 1: I can find a way

Level 2: I can find different ways

Level 3: I know how many ways there are