

Starburst

Addition with 5-Digit Numbers

1

	5	6	8	3	3
+	4	4	1	0	5

2

	6	8	6	4	0
+	2	8	3	6	0

3

	9	2	1	9	5
+	1	7	7	4	2

4

	2	8	4	4	6
+	5	5	8	2	4

5

	6	8	5	8	6
+	7	5	0	1	9

6

	9	4	9	2	9
+	6	8	5	6	7

7

	8	4	6	5	8
+	8	5	8	5	8

8

	7	1	7	7	8
+	8	8	4	1	1

9

	3	4	5	2	2
+	4	5	8	6	1

10

	9	9	3	9	4
+	4	6	4	5	3

11

	9	8	5	8	4
+	5	2	4	2	6

12

	1	6	3	7	3
+	2	6	6	1	1



Subtraction with 5-Digit Numbers

1					
	7	4	3	2	1
-	1	3	9	3	4

2					
	5	2	4	1	3
-	2	3	1	2	0

3					
	8	5	2	3	2
-	7	1	4	0	1

4					
	3	2	6	5	3
-	1	8	3	4	1

5					
	5	3	1	4	5
-	3	2	6	7	2

6					
	4	6	5	8	1
-	1	3	6	2	3

7					
	8	5	9	1	3
-	3	3	5	7	5

8					
	2	9	3	1	4
-	1	3	0	2	3

9					
	2	5	5	2	1
-	1	2	0	1	4

10					
	9	1	7	8	9
-	5	8	8	1	6

11					
	7	3	4	7	1
-	6	4	3	4	2

12					
	7	6	7	4	3
-	6	2	1	0	2



1

Add together 40p, 70p and 30p.

6

What is the sum of 38, 20 and 87?

2

What is the total of 15, 19 and 23?

7

Samir buys three chocolate bars. The first costs 62p, the second costs 59p and the third costs 70p. How much did he spend in total?

3

Lauren was given some money for her birthday. Her brother gave her £2.50, her sister gave her £1.00 and her grandma gave her £4.50. How much did she get in total?

8

A teacher gives out 16 pencils on Monday, 22 on Tuesday and 29 on Thursday. How many pencils did she give out in total?

4

Omar collects 68 bus tickets and 34 train tickets. How many does he have in total?

9

How much is 84p add 39p add 47p?

5

Caroline has 2 bags of apples. One bag has 13 red apples in and the other bag has 24 green apples. How many apples does she have in total?

10

Three sacks of potatoes were delivered to a shop. They weighed 18kg, 35kg and 27kg. How much did they weigh in total?



11

Hannah has 58p and Max has 74p. How much do they have in total?

16

Tarek collects drawings of owls. He has 24 drawings and his friend gives him 16. How many drawings does he have now?

12

Jenny runs for 46 seconds and Ali runs for 73 seconds. What was the total time they ran for?

17

There are 32 children in one class and 28 children in another. What is the sum of the children in both classes?

13

A shop has 78 ripe plums and 22 rotten ones. How many plums are there in total?

18

Scott has 39p and Robert has 84p. What is the total amount of money?

14

What is the total when 72 is added to 38?

19

Ashton gets 59p pocket money. She then finds 65p under her bed. How much does she have in total?

15

Mohammed finds 73p on his way to school and 12p on his way home. How much did he find in total?

20

What is the total when 34 is added to 49?

Mental Calculations Challenge

Look at the varied addition and subtraction calculations below and work your way through them. See how many points you can score. You could play against others or set yourself a time limit.

Scoring System:

Score 2 points for every correct answer achieved after using a written method of calculation.

Score 0 points for any incorrect answer achieved after using a written method of calculation.

Score 3 points for every correct answer achieved after a mental calculation.

Score 1 point for each incorrect answer achieved after using a mental calculation.

1

$$68 + 45 + 17 =$$

2

$$14.6 + 6.14 =$$

3

$$78 - 53 =$$

4

$$42 + 43 + 44 =$$

5

$$9999 + 3 =$$

6

$$456 - 111 =$$



Mental Calculations Challenge

7

$0.73 + 0.37 =$

8

$100 - 0.1 =$

9

$28.2 + 99 =$

10

$134 + 375 =$

11

$4586 - 1471 =$

12

$47\ 001 - 59 =$

13

$27 - 53 =$

14

$100\ 000 - 10\ 000 =$

15

$5362 + 99 =$

I scored

--

points.



Milky Way

Using Rounding to Check Answers

Round these numbers to the nearest 100 and perform a mental calculation. Decide if your answer is close enough to the answer given to suggest that it is correct.

	Calculation	Rounded Approximation	Does the Original Answer Look Correct Based on Rounded Estimation?	Correct Answer If Necessary
e.g.	$325.7 + 485.4 = 911.1$	$300 + 500 = 800$	no	811.1
1	$615 + 391 = 906$			
2	$872 + 211 = 1083$			
3	$235.3 + 258.9 = 512.12$			
4	$475.23 + 596.98 = 1172.21$			
5	$4567 + 3219 = 7786$			
6	$5387.3 + 2418.8 = 7806.1$			

Round these numbers to the nearest 10 and perform a mental calculation. Decide if your answer is close enough to the answer given to suggest that it is correct.

	Calculation	Rounded Approximation	Does the Original Answer Look Correct Based on Rounded Estimation?	Correct Answer If Necessary
e.g.	$456 + 242 = 698$	$460 + 240 = 700$	yes	
1	$371 + 287 = 658$			
2	$548 + 342 = 890$			
3	$784 + 329 = 1113$			
4	$234.8 + 172.9 = 307.7$			
5	$896.6 + 402.7 = 1299.3$			
6	$345.45 + 378.31 = 623.76$			



Look at the answers to these word problems. Can you suggest what a sensible rounded answer would be and why?

e.g.

If George wants to buy a tablet that costs £112 and he has 27 weeks to save up for it, how much should he save per week?

$$112 \div 27 = 4.14811481$$

Units: pounds

Rounded Answer: £4.15

Reasoning:

I have rounded it to the nearest actual sum of money above what he needs so he can save real money and still have enough.

1

Charlie wants to make a rope bridge in his garden. He has calculated that he will need 6 pieces of rope each 1.23m long. The shop sells rope by the metre – how much will he need to buy?

$$1.23 \times 6 = 7.38$$

Units:

Rounded Answer:

Reasoning:

2

There are 137 people going on the trip to zoo and each minibus can take 13 passengers. How many buses will need to be booked for the trip?

$$137 \div 13 = 10.538461$$

Units:

Rounded Answer:

Reasoning:



3

Tina is reading a book which is 449 pages long. If she reads 17 pages a night before she falls asleep, how long will it take her to finish the book?

Calculation:

Units:

Rounded Answer:

Reasoning:

4

David's dad wanted to buy him a new carpet for his bedroom. David's dad measured his bedroom and found that it was 3.25m long and 2.96m wide. Carpet is sold in square metres (m^2). How many square metres of carpet does he need?

Calculation:

Units:

Rounded Answer:

Reasoning:

5

Jemma's family drive to their holiday destination. They drive until lunchtime which takes 2 hours, 44 minutes and 15 seconds. After lunch, it takes another 3 hours, 12 minutes and 44 seconds to reach their hotel. How long might they say the journey took if they were asked?

Calculation:

Units:

Rounded Answer:

Reasoning:



Addition and Subtraction Using the Column Method

Solve these calculations using the column method. First, estimate the answers by rounding the numbers to the nearest one, ten, hundred or thousand, depending on the numbers in the calculation.

1 $582.43 - 296.85$

Estimate:

2 $279\,316 + 457\,488$

Estimate:

Addition and Subtraction Using the Column Method

3

$$682\,197 - 258\,698$$

Estimate:

4

$$913.68 + 294.84$$

Estimate:

Addition and Subtraction Using the Column Method

5

$$400\,162 - 197\,664$$

Estimate:

6

$$5962.56 - 3497.07$$

Estimate:

Addition and Subtraction Using the Column Method

7

$$20.785 + 54.693$$

Estimate:

8

$$148\,936 + 759\,786$$

Estimate:

Addition and Subtraction Using the Column Method

9

$$682\,197 - 258\,698$$

Estimate:

10

$$960\,135 + 72\,968$$

Estimate: