

# Year 5 Maths Addition and Subtraction Workbook



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## Year 5 Programme of Study – Addition and Subtraction

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Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).	Addition with 5 digit numbers	3	
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Add and subtract numbers mentally with increasingly large numbers.	Mental Maths Adding Worksheets	5 - 6	
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Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Using Rounding to Check Answers	11	
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# Addition With 5 Digit Numbers

$$\begin{array}{r} 1. \quad 56833 \\ + 44105 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 68640 \\ + 28360 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 92195 \\ + 17742 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 28446 \\ + 55824 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 68586 \\ + 75019 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 94929 \\ + 68567 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 84658 \\ + 85858 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 71778 \\ + 88411 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 34522 \\ + 45861 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 99394 \\ + 46453 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 98584 \\ + 52426 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 16373 \\ + 26611 \\ \hline \end{array}$$

# Subtraction With 5 Digit Numbers

$$\begin{array}{r} 1. \quad 74321 \\ - 13934 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 52413 \\ - 23120 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 85232 \\ - 71401 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 32653 \\ - 18341 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 53145 \\ - 32672 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 46581 \\ - 13623 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 85913 \\ - 33575 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 29314 \\ - 13023 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 25521 \\ - 12014 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 91789 \\ - 58816 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 73471 \\ - 64342 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 76743 \\ - 62102 \\ \hline \end{array}$$

# Mental Maths Adding

Read the problems and answer them in your head.

1. Add together 40p, 70p and 30p.
2. What is the total of 15, 19 and 23?
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?
4. Omar collects 68 bus tickets and 34 train tickets. How many does he have in total.
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?
6. What is the sum of 38, 20 and 87?
7. Samir buys three chocolate bars. The first costs 62p, the second costs 59p and the last costs 70p. How much did he spend 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.
9. How much is 84p plus 39p plus 47p?
10. Three sacks of potatoes were delivered to a shop. They weighed 18kg, 35 kg and 27kg. How much did they weigh in total?
11. Hannah has 58p and Max has 74p. How much do they have in total?
12. Jenny runs for 46 seconds and Ali runs for 73 seconds. What was the total time they ran for?
13. A shop has 78 ripe plums and 22 rotten ones. How many plums are there altogether?
14. What is the total when 72 is added to 38?
15. Mohammed finds 73p on his way to school and 12p on his way home. How much did he find 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?
17. There are 32 children in one class and 28 children in another. What is the sum of the children in both classes?
18. Scott has 39p and Robert has 84p. What is the total amount of money?
19. Ashton gets 59p pocket money. She then finds 65p under her bed. How much does she have in total?
20. What is the total when 34 is added to 49?

# Subtracting Multiples of 1000

1.  $6438 - 3000 =$

2.  $3049 - 2000 =$

3.  $9823 - 5000 =$

4.  $6234 - 4000 =$

5.  $7905 - 6000 =$

6.  $4369 - 2000 =$

7.  $6099 - 3000 =$

8.  $2997 - 2000 =$

9.  $7804 - 6000 =$

10.  $9993 - 5000 =$

11.  $8661 - 8000 =$

12.  $6880 - 5000 =$

13.  $4820 - 2000 =$

14.  $6713 - 4000 =$

15.  $9778 - 9000 =$

16.  $11\ 052 - 5000 =$

17.  $17\ 993 - 7000 =$

18.  $55\ 702 - 6000 =$

19.  $89\ 362 - 3000 =$

20.  $203\ 905 - 4000$

21.  $194\ 641 - 9000 =$

22.  $501\ 785 - 3000$

23.  $73\ 043 - 3000 =$

24.  $604\ 234 - 4000 =$

25.  $70\ 382 - 5000 =$

26.  $652\ 802 - 6000 =$

27.  $91\ 863 - 7000 =$

28.  $600\ 788 - 9000 =$

29.  $80\ 261 - 7000 =$

30.  $1\ 000\ 000 - 10\ 000 =$

## Challenge

Can you subtract 2002, 3030 or 4400 or other multiples of 1001, 1010 or 1100 from some of the questions? What about multiples of 10 000?

# Adding Multiples of 1000

1.  $2358 + 2000 =$

2.  $4829 + 3000 =$

3.  $8083 + 4000 =$

4.  $3850 + 5000 =$

5.  $7862 + 3000 =$

6.  $3409 + 4000 =$

7.  $6749 + 2000 =$

8.  $5597 + 4000 =$

9.  $1006 + 8000 =$

10.  $385 + 7000 =$

11.  $8763 + 2000 =$

12.  $9015 + 3000 =$

13.  $6530 + 3000 =$

14.  $1165 + 8000 =$

15.  $4708 + 4000 =$

16.  $11\ 666 + 8000 =$

17.  $13\ 647 + 5000 =$

18.  $28\ 902 + 9000 =$

19.  $29\ 023 + 4000 =$

20.  $300\ 456 + 6000 =$

21.  $156\ 982 + 4000 =$

22.  $289\ 505 + 8000 =$

23.  $56\ 903 + 9000 =$

24.  $707\ 034 + 3000 =$

25.  $38\ 892 + 7000 =$

26.  $579\ 902 + 8000 =$

27.  $79\ 672 + 6000 =$

28.  $399\ 084 + 7000 =$

29.  $60\ 271 + 4000 =$

30.  $996\ 000 + 6000 =$

## Challenge

Can you add 2002, 3030 or 4400 or other multiples of 1001, 1010 or 1100 to some of the questions? What about multiples of 10 000?

# 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.  $456 - 111 =$


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.  $5362 + 99 =$


16.  $408 - 19 =$


I scored  points.

# 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?	Corrected Answer if necessary (You may need to recalculate)
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.	$5387.3 + 2418.8 = 7806.1$			
7.	$4879.54 + 2712.89 = 7952.43$			
8.	$97433 + 87679 = 181152$			

Round these numbers to the nearest ten 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?	Corrected Answer if necessary (You may need to recalculate)
e.g.	$456 + 242 = 698$	$460 + 240 = 700$	Yes!	
1.	$371 + 287 = 558$			
2.	$548 + 342 = 890$			
3.	$784 + 329 = 1113$			
4.	$234.8 + 172.9 = 307.7$			
5.	$896.6 + 402.7 = 1299.3$			
6.	$345.45 + 378.31 = 623.76$			
7.	$1762.99 + 37.22 = 2100.11$			
8.	$4873.23 + 151.82 = 5025.05$			

# Rounding in Context

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

Question	Calculation	Units	Rounded Answer	Reasoning
<p><b>e.g.</b> 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?</p>	$112 \div 27 = 4.14811481$	Pounds	£4.15	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.
<p>1. Charlie wants to make a rope bridge in his garden. He has calculated that he will need 6 pieces of rope each 1.23 cm long. The shop sells rope by the metre – how much will he need to buy?</p>	$1.23 \times 6 = 7.38$			
<p>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?</p>	$137 \div 13 = 10.538461$			

<p>1. 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?</p>				
<p>2. Hamza wants to know what the population of the UK is for a quiz question. He finds out the following: England 53 124 565, Scotland 5 128 954, Wales 3 165 438, and Northern Ireland 1876031. What should the answer be in the quiz?</p>				
<p>3. David's dad wanted to buy him new carpet for his bedroom. First David's dad measured his bedroom and found that it was 3.25m long and 2.96m wide. Then he contacted the shop who told him that carpet was sold in square metres (m<sup>2</sup>). How many square metres of carpet did they need?</p>				
<p>4. Jemma's family drive to their holiday destination. They drive until lunchtime which takes them 2 hrs 44 mins and 15 seconds. After lunch it takes another 3 hrs 12 mins and 44 seconds to reach their hotel. How long might they say the journey took if they were asked?</p>				





# Multi-Step Addition and Subtraction Problems

No.	Question	Calculation required (Do brackets first!)	Method	Answer
E.g.	The stadium has 25 000 seats – 11 348 adults and 2767 children come to see the game. How many empty seats are there?	25000 – (11348 + 2767) =		10 885
1.	Dorothy's family are saving money for a holiday costing £1845 – if they have already saved £490 and then raise £146 from a car boot sale, how much more do they need to save?			
2.	A study of 32 164 people found that 25 412 were right handed, 3849 were left handed and the remainder were ambidextrous (could use either hand) How many were ambidextrous?			

3.	<p>The crisp factory needs to make 85 000 bags an hour. If a machine breaks down and the factory only makes 47 233 bags in one hour, how many does it need to make in the next hour to catch up?</p>			
4.	<p>Dave earns £19 385 a year as a bus driver and his wife earns £28 460 as a teacher. If Dave gets a pay rise of £217 a month how much less than his wife does he earn?</p>			
5.	<p>If Cleopatra was born in 69 BC and lived to be 39 years old – how many years ago did she die?</p>			