

Year 5: Missing digits and number puzzles: answers

Year 5 - Column Addition and Subtraction - Lesson 2.6

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/ks2-sats/maths/year-5/ch02-addition-subtraction/missing-digits-and-number-puzzles/

Exercise 2F Missing digits and puzzles Non-calculator

1 Find the missing digits in each addition. Each box is one digit.

(a)

TTh	Th	H	T	O
5	?	4	1	2
+	2	8	7	?
8	2	1	5	?

Answer: 8, 4, 3

(b)

TTh	Th	H	T	O
?	7	2	8	5
+	3	6	?	1
8	3	8	?	4

Answer: 0, 5, 4

(c)

TTh	Th	H	T	O
6	0	3	5	?
+	2	?	8	7
9	0	?	2	4

Answer: 0, 2, 9

2 These additions have six-digit numbers. Find the missing digits.

(a)

HTh	TTh	Th	H	T	O
?	8	5	4	6	7
+	2	?	7	2	8
6	3	2	?	5	?

Answer: 6, 7, 4, 3

(b)

HTh	TTh	Th	H	T	O
5	?	4	8	3	0
+	3	9	6	?	5
?	0	1	5	5	5

Answer: 7, 0, 9

(c)

HTh	TTh	Th	H	T	O
2	7	?	9	1	5
+	?	6	3	0	8
7	4	2	0	?	4

Answer: 0, 8, 4

3 Find the missing digits in each subtraction. Use addition to help you.

(a)

TTh	Th	H	T	O
9	?	5	0	0
-	?	7	2	6
4	3	2	?	2

Answer: 3, 0, 4

(b)

TTh	Th	H	T	O
7	3	?	0	5
-	2	8	6	7
4	?	7	2	8

Answer: 7, 4, 4

(c)

HTh	TTh	Th	H	T	O
?	1	7	2	4	0
-	3	5	?	1	8
4	?	8	0	5	?

Answer: 4, 9, 5, 8

(d)

HTh	TTh	Th	H	T	O
5	0	0	0	0	?
-	2	1	?	4	7
?	8	6	?	2	5

Answer: 0, 5, 3, 2

4 Find the missing number in each equation. Work out the side without a box first.

(a) $63,500 + \boxed{?} = 100,000 - 14,500$

Answer: 22,000

(b) $250,000 - \boxed{?} = 180,000 + 35,000$

Answer: 35,000

(c) $\boxed{?} - 48,750 = 90,000 - 25,000$

Answer: 113,750

(d) $7,450 + \boxed{?} = 3,000 + 9,999$

Answer: 5,549

5 Find the digit that can go in the box.

(a) The smallest digit so that $6,5\boxed{?}0 + 2,480$ is more than 9,000

Answer: 3

(b) The largest digit so that $4,\boxed{?}75 + 38,600$ is less than 43,000

Answer: 3

(c) The smallest digit so that $2,7\boxed{?}5 + 56,090$ is more than 58,800

Answer: 1

6 Dev thinks of a number. He adds 18,450. Then he subtracts 7,300. His answer is 50,000. What number did Dev think of first? Show how you know.

Answer: 38,850

7 Hana is finding the missing digits.

	TTh	Th	H	T	O
	6	3	4		8
+	2		3	5	9
	9	0	7	8	

In the tens column she says, "The missing digit is 3, because $8 - 5 = 3$." Explain Hana's mistake. What is the correct digit?

Answer: Hana forgot the carry. The digit is 2.

8 Check only the **ones digit**. Can each answer be right? Write "could be right" or "cannot be right".

(a) $4,358 + 2,719 = 7,075$

Answer: Cannot be right

(b) $6,003 - 2,848 = 3,155$

Answer: Could be right

(c) $52,346 + 38,179 = 90,535$

Answer: Could be right

(d) $80,420 - 34,867 = 45,556$

Answer: Cannot be right

9 Always, sometimes or never? When you add two whole numbers and the answer ends in 0, both of the numbers end in 0.

Answer: Sometimes

10 Use each of the digit cards 1, 3, 4, 6, 7 and 9 once to make two three-digit numbers. What is the **largest** difference you can make?

Answer: $976 - 134 = 842$

- 11** Use each of the digit cards 2, 3, 5, 6, 8 and 9 once to make two three-digit numbers. What is the **smallest** difference you can make?

Answer: $623 - 598 = 25$