

Grade 2 · Adding and Subtracting Within 1,000

· Test Answer Key

Common Core 2.NBT.B.7, 2.NBT.B.8 · mathovore.fr

This key shows the full worked solution for each question and how the 20 points are given. Accept any correct strategy, such as blocks, a number line or the column method, when the answer is right.

Grade 2 Common Core: 2.NBT.B.7 · 2.NBT.B.8

Question 1: Hundreds (2 points)

- a. $4+3=7$ hundreds. $400+300=700$
- b. $8-3=5$ hundreds, and 50 stays. $850-300=550$

Scoring: 1 point for each correct answer.

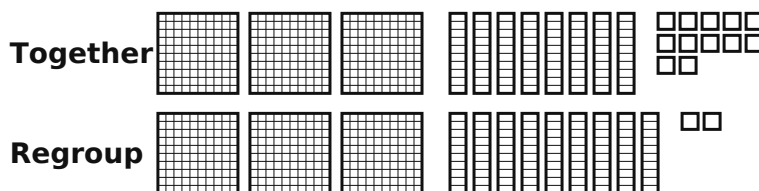
Question 2: Mental math (2 points)

- a. Tens go up by 1. $467+10=477$
- b. Hundreds go down by 1. $725-100=625$

Scoring: 1 point for each correct answer.

Question 3: Blocks and sums (2 points)

- a. Ones: $4+8=12$. That is 1 ten and 2 ones. Write 2, carry 1. Tens: $3+5+1=9$. Hundreds: $1+2=3$. $134+258=392$
- b. The 12 ones make 1 ten and 2 ones. Tens: $3+5+1=9$. **9 tens**



10 ones are traded for 1 ten.

Scoring: 1 point for 392, 1 point for 9 tens.

Question 4: Add three-digit numbers (2 points)

- a. Ones: $7+9=16$. That is 1 ten and 6 ones. Write 6, carry 1. Tens: $6+5+1=12$. That is 1 hundred and 2 tens. Write 2, carry 1. Hundreds: $2+3+1=6$. $267+359=626$
- b. Ones: $9+5=14$. That is 1 ten and 4 ones. Write 4, carry 1. Tens: $8+3+1=12$. That is 1 hundred and 2 tens. Write 2, carry 1. Hundreds: $4+2+1=7$. $489+235=724$

Scoring: 1 point for each correct sum.

Question 5: Subtract three-digit numbers (2 points)

- a. Ones: $5-2=3$. Tens: 4 is less than 8, so trade 1 hundred for 10 tens. Now there are 14 tens and 5 hundreds. Tens: $14-8=6$. Hundreds: $5-3=2$. $645-382=263$
- b. Ones: 3 is less than 8 and there are 0 tens. Trade 1 hundred for 10 tens, then trade 1 ten for 10 ones. Now there are 6 hundreds, 9 tens and 13 ones. Ones: $13-8=5$. Tens: $9-5=4$. Hundreds: $6-4=2$. $703-458=245$

Scoring: 1 point for each correct difference.

Question 6: Find the mistake (2 points)

- a. Mei subtracted the smaller digit from the bigger digit in each column. The top digits are 3 and 4, which are smaller than 7 and 6, so she had to trade.
- b. Ones: 3 is less than 7, so trade 1 ten for 10 ones. Now there are 13 ones and 3 tens. Ones: $13-7=6$. Tens: 3 is less than 6, so trade 1 hundred for 10 tens. Now there are 13 tens and 4 hundreds. Tens: $13-6=7$. Hundreds: $4-2=2$. $543-267=276$

Check: $276+267=543$.

Scoring: 1 point for saying she did not trade (she reversed the digits), 1 point for 276.

Question 7: Missing numbers (2 points)

- a. Ones: 0 is less than 7 and there are 0 tens. Trade 1 hundred for 10 tens, then trade 1 ten for 10 ones. Now there are 4 hundreds, 9 tens and 10 ones. Ones: $10-7=3$. Tens: $9-8=1$. Hundreds: $4-1=3$. $500-187=313$ 313
- b. Ones: 0 is less than 5 and there are 0 tens. Trade 1 hundred for 10 tens, then trade 1 ten for 10 ones. Now there are 5 hundreds, 9 tens and 10 ones. Ones: $10-5=5$. Tens: $9-7=2$. Hundreds: $5-2=3$. $600-275=325$ 325

Scoring: 1 point for each correct missing number.

Question 8: Can drive (3 points)

- a. Ones: $8+5=13$. That is 1 ten and 3 ones. Write 3, carry 1. Tens: $2+6+1=9$. Hundreds:

$$4+3=7. 428+365=793$$

- b. Subtract the total from the goal. Ones: 0 is less than 3 and there are 0 tens. Trade 1 hundred for 10 tens, then trade 1 ten for 10 ones. Now there are 8 hundreds, 9 tens and 10 ones. Ones: $10-3=7$. Tens: $9-9=0$. Hundreds: $8-7=1$. $900-793=107$ **107 more cans**

793 cans	
428	365

The total is 793.

Check: $793+107=900$.

Scoring: 1 point for 793. For part b, 1 point for subtracting 793 from 900 (or counting up) and 1 point for 107.

Question 9: Jumps of 100 (3 points)

- a. $480+100=580$, then $580+100=680$. **680**
 b. $680-10=670$. **670**
 c. $670-100=570$. **570**

Scoring: 1 point for each correct number: 680, 670 and 570.

Total
20 points