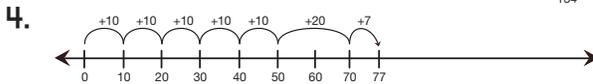
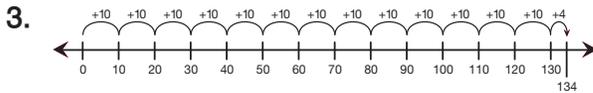


Student Guide

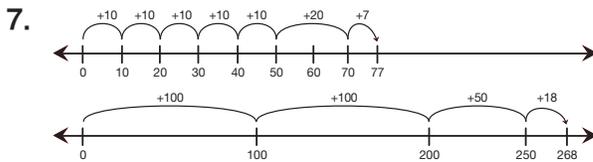
Number Sentences

Questions 1–14 (SG pp. 124–126)

1. **A.** False; $2 + 300 + 1000 = 1302$, but $(3 \times 10) + 1000 = 30 + 1000 = 1030$. 1302 does not equal 1030.
 - B.** True; The numbers on the right are 2074 in expanded form.
 - C.** False; $8000 + 900 + 40 + 6 = 8946$, but $8000 + 800 + 40 + 6 = 8846$. 8946 does not equal 8846.
 - D.** False; The 4 is in the tens place so it should be $5000 + 40 + 5$ on the right.
 - E.** True; $9000 + 600 + 70 + 8 = 9678$ and $9000 + 678 = 9678$
2. Yes, the number sentence is true. Twelve hops of 100 is written as 12×100 . Hop + 5 more to make 1205.



5. A correct equation is the same as a true number sentence because the amounts on both sides are equal.
6. **A.** correct equation
B. correct equation
C. not correct
D. correct equation
E. not correct

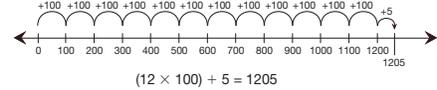


1. Tell whether the number sentences below are true or false. Be ready to explain your thinking. You may use number lines or other strategies.

- A.** $2 + 30 + 1000 = (3 \times 10) + 1000$
- B.** $2074 = 2000 + 70 + 4$
- C.** $8000 + 900 + 40 + 6 = 8000 + 800 + 40 + 6$
- D.** $5045 = 5000 + 400 + 5$
- E.** $9000 + 600 + 70 + 8 = 9000 + 678$

2. Study the number line below.

- Do you agree that the number sentence below the number line is true?
- How does the sentence match the moves on the number line?



3. Draw a number line to show that the following number sentence is true.

$(13 \times 10) + 4 = 134$

4. Draw a number line to show that the following number sentence is a correct equation.

$(5 \times 10) + 20 + 7 = 77$

5. Is a correct equation the same as a true number sentence? Why or why not?

6. Tell whether the number sentences below are correct equations or not.

- A.** $35 + 100 = (3 \times 10) + 5 + 100$
- B.** $200 + 200 + 70 = 400 + 60 + 10$
- C.** $200 + 60 + 4 = 100 + 100 + 4$
- D.** $(6 \times 10) + 8 + 200 = (2 \times 100) + 50 + 18$
- E.** $(100 \times 3) + 2 = 100 + 32$

7. Draw 2 number lines, one for each side of the equal sign, to show why your answer to Question 6D is correct.

Student Guide - Page 124

Unknowns

Mrs. Dewey wrote the equation below on the board. The n is called an **unknown**. She said one thing that mathematicians do is to look for the number to replace n that will make the number sentence true.

Romesh studied the equation: $3072 = 3000 + n + 2$



I think n must be 70. If you write 3072 in expanded form, it's $3000 + 70 + 2$ and the 70 is missing.

8. Replace the letter with a number to make each equation true.

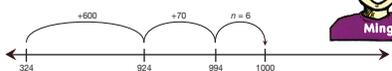
- A. $892 = 800 + n + 2$
- B. $892 = 700 + n + 2$
- C. $783 = n + 80 + 3$
- D. $783 = 700 + 70 + n$
- E. $3000 + 10 + 7 = n$
- F. $3000 + 10 + 7 = 3000 + n$
- G. $982 + 8 + 10 = 982 + 10 + 10 - n$

9. Explain how you know your answer to Question 8D is true.

10. Ming decided that n equals 6 in the following number sentence:

$$1000 = 324 + 600 + 70 + n$$

He used the following number line to explain his thinking. Do you agree with Ming? Why or why not?



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Student Guide - Page 125

✓ Check-In: Questions 11-14

11. Tell whether the number sentences below are true.
 - A. $5764 = 5000 + 600 + 70 + 4$
 - B. $(3 \times 100) + 7 + (2 \times 10) = 327$
12. Draw a number line to show your answer to Question 11B is correct.
13. Replace the letter with a number to make each number sentence true.
 - A. $1000 = 800 + n$
 - B. $1000 = 374 + 6 + 20 + n$
 - C. $1000 = 374 + 600 + 30 - n$
 - D. $1000 = 101 + 9 + 90 + n$
 - E. $1000 = 499 + n + 500$
14. Draw a number line to show that your answer to Question 13C is correct.

Choose problems on the *Number Lines and Number Sentences* pages in the *Student Activity Book* to practice showing different partitions of a number and finding the unknown with number lines.

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Student Guide - Page 126

*Answers and/or discussion are included in the lesson.

2 TG • Grade 4 • Unit 4 • Lesson 3 • Answer Key

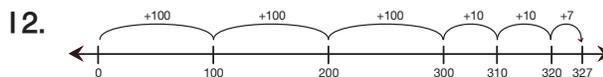
8. A. $n = 90$
- B. $n = 190$
- C. $n = 700$
- D.* $n = 13$
- E. $n = 3017$
- F. $n = 17$
- G. $n = 2$

9. Answers will vary. A number line shows:

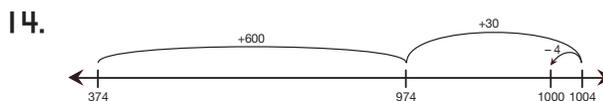


10.* Agree. Students' reasons will vary. Possible response: $324 + 600 + 70 + 6$ adds to 1000.

11. A. False number sentence
- B. True number sentence



13. A. $n = 200$
- B. $n = 600$
- C. $n = 4$
- D. $n = 800$
- E. $n = 1$



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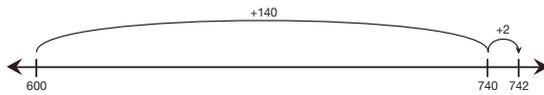
Student Guide

Homework

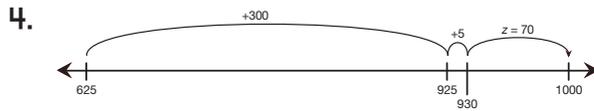
Questions 1–4 (SG p. 127)

1. A. $n = 100$
 B. $n = 2001$
 C. $n = 4000$
 D. $n = 30$
 E. $n = 140$

2. Answers will vary. Using the number line:



3. A. $n = 850$
 B. $n = 10$
 C. $n = 70$
 D. $n = 500$
 E. $n = 10$
 F. $n = 6$



Homework

1. Find n to make the number sentence true. You may use number lines or other strategies.
 - A. $600 + n + 6 = 706$
 - B. $1000 + 1000 + 1 = n$
 - C. $4076 = n + 70 + 6$
 - D. $400 + 30 + 7 = 7 + n + 400$
 - E. $700 + 40 + 2 = 600 + n + 2$
2. Show or tell how you know your answer to Question 1E is correct.
3. Replace each letter with a number to make the number sentence true. You may use number lines or other strategies.
 - A. $100 + 45 + 5 + n = 1000$
 - B. $1000 = 810 + 100 + 80 + n$
 - C. $1000 = 625 + 300 + n + 5$
 - D. $1000 = 456 + 4 + 40 + n$
 - E. $9000 = 8982 + 8 + n$
 - F. $1000 = 756 + 200 + 50 - n$
4. Draw a number line to show that your answer to Question 3C is correct.

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Number Sentences

SG • Grade 4 • Unit 4 • Lesson 3 127

Student Guide - Page 127