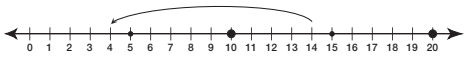
Workshop: Reasoning from Known Facts

Use the following Self-Check questions to check your progress with using strategies to subtract.

✓ **Self-Check: Questions 1-4**

When Rosa uses a number line for subtraction problems, she often thinks of tens.

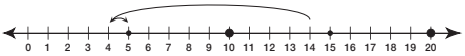
1. Here is her solution for solving 14 – 10.



A. How did she know to stop at 4?

B. Complete the following number sentence: 14 – ☐ = 4

2. Here is Rosa's solution for solving 14 – 9.



A. Explain Rosa's steps. What is the answer?

B. Complete the following number sentence that shows Rosa's strategy. 14 – 9 = 14 – 10 + ☐

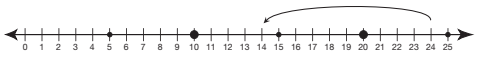
3. A. Use Rosa's strategy to solve 14 – 8. Explain your steps.

B. Complete the number sentence that shows this strategy.

14 – 8 = 14 – 10 + ☐

***Student Guide* - Page 47**

4. Rosa started using this strategy to solve 24 – 9.



A. What should she do to finish?

B. Complete the number sentence that shows this strategy.

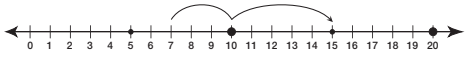
24 – 10 + ☐ = 15

Use the *Reasoning From Known Facts Workshop Menu* in the *Student Activity Book* to choose practice problems. Choose problems from the first row of the menu.

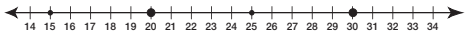
✓ **Self-Check: Questions 5-6**

When Mark uses a number line for subtraction problems, he often thinks of addition.

5. Mark solved 15 – 7 on the number line. Write a number sentence that shows Mark's strategy and his solution.



6. Solve 29 – 17 using Mark's strategy. Show or tell your strategy.



Use the *Reasoning From Known Facts Workshop Menu* in the *Student Activity Book* to choose practice problems. Choose problems from the second row of the menu.

***Student Guide* - Page 48**

Student Guide

Workshop: Reasoning From Known Facts (SG pp. 47–48)
Questions 1–6

1. A. Possible answers: She reasoned from the addition fact 4 + 10 = 14. She knew that when she subtracts 10, the ones digit stays the same.

B. 14 – 10 = 4

2. A. Rosa took away 10 and then added 1 because 10 is one more than 9. Five is the answer.

B.* 14 – 9 = 14 – 10 + 1

3. A.* Take 10 from 14 to get 4. Add 2 because 8 is equal to 10 – 2.

B.* 14 – 8 = 14 – 10 + 2

4. A.* Move 1 forward to 15.

B.* 24 – 10 + 1 = 15

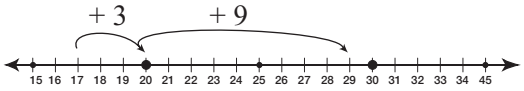
5. 7 + (3 + 5) = 15, since 5 + 3 = 8, 15 – 7 = 8

6. 12; I used thinking addition

17 + (3 + 9) = 29

20

So 29 – 17 = 3 + 9, or 12



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