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Workshop: Subtraction (SG pp. 164–166) Questions 1–9

1. $255; 255 + 6965 = 7220$

2. Student responses will vary. Students might notice that Tanya sometimes subtracts the top digit from the bottom digit. Her answer is too big.

3. Students should agree with Ana and Jacob. Ana and Jacob noticed that Tanya was wrong and checked her answer for reasonableness.

4. $53; 53 + 268 = 321$

5. Student responses will vary. Students might notice that Michael regrouped incorrectly.

6. Students should agree with Jackie, Luis, and Irma. They knew that Michael traded incorrectly because the number sentence for the trades did not add up to 321.

7. 112; 112 + 189 = 301

8. Student responses will vary. Students might notice Nicholas' regrouping error. Students also might notice that his strategy is not very efficient.

9.* Students should agree with all 4 students.

Homework (SG p. 167)
Questions A–G

Strategies will vary.

A.
$$83 = 80 + 3 = 70 + 13$$
$$47 = 40 + 7 = 40 + 7$$
$$\overline{30 + 6 = 36}$$

Check:
$$\overset{1}{3}6$$
$$+ 47$$
$$\overline{83}$$

B.
$$\begin{array}{r} 251 \\ -79 \\ \hline 172 \end{array}$$

$$79 + ① = 80$$
$$80 + ⑳ = 100$$
$$100 + ⑩⓪ = 200$$
$$200 + �$$
$$200 + �1 = 251$$
$$100 + 51 + 20 + 1 = 172$$

Check:
$$\overset{1\,1}{172}$$
$$+ 79$$
$$\overline{251}$$

C.
$$\begin{array}{r} 342 \\ -295 \\ \hline 47 \end{array}$$

+5   +42

295 300   342

$$295 + (⑤ + 42) = 342$$

Check:
$$\overset{1\,1}{295}$$
$$+ 47$$
$$\overline{342}$$

D.
$$\begin{array}{r} \overset{7\,13\,6\,16}{8376} \\ -5847 \\ \hline 2529 \end{array}$$

Check:
$$\overset{11}{5847}$$
$$+ 2529$$
$$\overline{8376}$$

E.

+3 +10 +10 +10 +3

36;   47 50 60 70 80 83

$$47 + ③ + ㉚ + ③ = 83$$

F. Possible response: From 295, count up ⑤ to 300, and then up ㊷ to 342.

5 + 42 = 47, so 342 – 295 = 47.

G. Responses will vary.

Subtraction Strategies

7. Solve 301 – 189. Check your answer with addition.

8. What do you think about Nicholas's solution?

Nicholas's solution

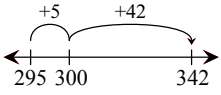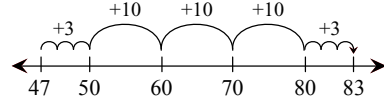$$\overset{2\,10\,11}{301}$$
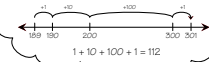$$-189$$
$$\overline{122}$$

Nicholas

9. Which students do you agree with? Tell why.
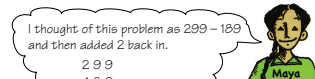
Linda: I think he forgot something. 200 + 100 + 11 is not 301.

Jerome: I think Nicholas's strategy is a lot of work. I think counting on is better. All that trading is a lot to keep track of.

189 190   200   300 301
1 + 10 + 100 + 1 = 112

Romesh: When I use paper and pencil for problems with zeros, I do this:

$$\overset{29\,11}{301}$$
$$-189$$
$$\overline{112}$$

Less to keep track of.

Maya: I thought of this problem as 299 – 189 and then added 2 back in.

299
– 189
110 + 2 = 112

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Homework

Solve the following problems. Choose an efficient method. Show how to check each problem with addition. Use the *Subtraction Strategies Menu* from the *Student Activity Book* or the *Student Guide* Reference section.

A.   83
         –47

B.   251
         –79

C.   342
         –295

D.   8376
         –5847

E. Solve Question A using a second method.

F. Explain a way to solve Question C using mental math.

G. Do you think you chose an efficient strategy to solve Question B? Explain.

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