Sixth Grade: Activity 8 Practice (pg. 105-6)

Lesson 8-1

1. a. $-5 + (-4) = -9$
   b. $4 + (-7) = -3$
2. a. -6
   b. 2
   c. -10
3. a. 5
   b. -4
   c. -3
4. a. -3
   b. -7
   c. -6
   d. 3
   e. 5
5. 0; Sample answer: Using counters, a number and its opposite form the same number of zero pairs, and the zero pairs have a total sum of 0.

Lesson 8-2

6. a. positive
   b. negative
   c. negative
   d. positive
7. 8
8. -13
9. 7
10. -12
11. -2
12. -39
13. -3
14. 29
15. -14
16. B
17. Yes; Sample answer: Consider finding the sum on a number line. The number of units and direction of the addends changes the order of the process but does not change the final point you land on.
18. -36 ft
19. 4°C
20. 25°F

21. a. $-7 - (-4) = -3$
   b. $2 - (-5) = 7$
22. 4
23. -2
24. -5
25. -7
26. 18
27. -23
28. -13
29. -35
30. -5
31. 41
32. -4
33. 6
34. -9
35. -11
36. -16
37. 32
38. B
39. 20,602 ft: $20,320 - (-282) = 20,602$
40. $-14°C$; Answers may vary.
   $12 - 19 - 7 = 12 + (-19) + (-7)$
   $= -14$
41. -6; Sample answer: Write the expression as a sum and add from left to right.
42. No; the correct difference is 9. Sample answer: She confused the subtraction of integers with the addition of integers and added rather than subtracted.
43. Sample answer: It is similar when you subtract a lesser positive integer from a greater positive integer and when you subtract a greater negative integer from a lesser negative integer. Otherwise, it is different.
44. Sample answer: The whole numbers are part of the integers, so the rules for integers apply to whole numbers.

45. Sample answer: To add integers, locate the first addend on the number line. Then move the number of units right given by a positive integer or the number of units left given by a negative integer. The point where you end is the sum. To use a number line to subtract, change the subtraction expression to addition and add the opposite. Then follow the rules for adding on a number line.