1.2 Exercises

Check It Out
Help with Homework
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Vocabulary and Concept Check

1. **WRITING** How do you find the additive inverse of an integer?
2. **NUMBER SENSE** Is $3 + (-4)$ the same as $-4 + 3$? Explain.

Tell whether the sum is *positive*, *negative*, or *zero* without adding. Explain your reasoning.

3. $-8 + 20$
4. $50 + (-50)$
5. $-10 + (-18)$

Tell whether the statement is *true* or *false*. Explain your reasoning.

6. The sum of two negative integers is always negative.
7. An integer and its absolute value are always opposites.

Practice and Problem Solving

Add.

1 2 8. $6 + 4$
9. $-4 + (-6)$
10. $-2 + (-3)$
11. $-5 + 12$
12. $5 + (-7)$
13. $8 + (-8)$
14. $9 + (-11)$
15. $-3 + 13$
16. $-4 + (-16)$
17. $-3 + (-4)$
18. $14 + (-5)$
19. $0 + (-11)$
20. $-10 + (-15)$
21. $-13 + 9$
22. $18 + (-18)$
23. $-25 + (-9)$

ERROR ANALYSIS **Describe and correct the error in finding the sum.**

24. ✗ $9 + (-6) = -3$

25. ✗ $-10 + (-10) = 0$

26. **TEMPERATURE** The temperature is $-3°$F at 7 A.M. During the next four hours, the temperature increases $21°$F. What is the temperature at 11 A.M.?
27. **BANKING** Your bank account has a balance of $-\$12$. You deposit \$60. What is your new balance?

Add.

3 28. $13 + (-21) + 16$
29. $22 + (-14) + (-35)$
30. $-13 + 27 + (-18)$
31. $-19 + 26 + 14$
32. $-32 + (-17) + 42$
33. $-41 + (-15) + (-29)$

Tell how the Commutative and Associative Properties of Addition can help you find the sum mentally. Then find the sum.

34. $9 + 6 + (-6)$
35. $-8 + 13 + (-13)$
36. $9 + (-17) + (-9)$
37. $7 + (-12) + (-7)$
38. $-12 + 25 + (-15)$
39. $6 + (-9) + 14$