EXERCISES

Solve each equation. Check your solution.

12. \( a + 3 = 12 \)  
13. \( m - 8 = 13 \)  
14. \( 27 = 18 + g \)  
15. \( 32 + c = 24 \)  
16. \( 34 = m + 18 \)  
17. \( y + 43 = 68 \)  
18. \( k - 7.3 = 4.5 \)  
19. \( -5 + v = 3 \)  
20. \( m - 5 = -9 \)  
21. \( -9 = 3 + r \)  
22. \( -8 = y - 7 \)  
23. \( -34 = r + 9 \)  
24. \( -9 + w = -12 \)  
25. \( a + 3.9 = 5.6 \)  
26. \( e + 11.8 = 13.1 \)  
27. \( 13.2 = p + 4.7 \)  
28. \( s - 5.9 = 4.8 \)  
29. \( y - 16 = -5 \)  
30. If you decrease a number by 4, the result is \(-5\). This means \(n - 4 = -5\). Solve the equation to find the number. \(-1\)
31. Negative 10 is the sum of a number and \(-6\). Solve \(-10 = n + (-6)\) to find the number. \(-4\)

32. Aviation Orville and Wilbur Wright flew their airplane called Flyer I in Kitty Hawk, North Carolina, on December 17, 1903. Wilbur's flight was 364 feet, which was 120 feet longer than Orville's flight. Solve the equation \(f + 120 = 364\) to find the length of his flight. \(244\) feet

33. Geometry The sum of the measures of the angles of a triangle is \(180°\). Find the missing measure. \(a + 50° + 75° = 180°\)

34. Write an Equation Write about a real-life situation involving the photo at the left that can be represented by the equation \(x - 3 = 7\).

35. Critical Thinking Write two different equations that have \(-2\) as a solution. Sample answer: \(x - 5 = -7, x + 4 = 2\)

36. Test Practice (Lesson 5-6) Which graph shows a translation of the letter Z?

A

B

C

D

37. Find \(12 - (-4)\). (Lesson 5-5) \(16\)

38. On his most recent math test, Ricardo scored 84 out of 100 points. Express his score as a fraction in simplest form. (Lesson 4-5) \(21\)

39. Statistics The mean income for a group of accountants was $26,266.67. Their incomes were $17,500, $26,100, $19,800, $23,400, $21,300, and $49,500. In what way is the mean misleading? (Lesson 3-7)

Lesson 6-1 Solving Addition and Subtraction Equations 231

Extending the Lesson

Activity Working in small groups, have each student write an addition or subtraction equation and read it to the group. Each member must write a word problem that can be solved by using the equation.

4 ASSESS

Closing Activity Writing Have students write two equations—one that can be solved by using the Addition Property of Equality and one that can be solved using the Subtraction Property of Equality.

Assignment Guide

Core: 13–33 odd, 35–39
Enriched: 12–30 even, 32–39

Practice Masters, p. 42

6-1 Practice

Solving Addition and Subtraction Equations

Solve each equation. Check your solution.

1. \( r + 16 = 30 \)  
2. \( 24 = 23 + 1 \)  
3. \( 28 + 1 = 37 \)  
4. \( x + 6 = 15 \)  
5. \( 43 = 40 + 3 \)  
6. \( x + 3 = 12 \)  
7. \( x + 18 = 31 \)  
8. \( 123 = 120 + 3 \)  
9. \( x + 42 = 43 \)  
10. \( 28 + 10 = x \)  
11. \( 46 + 61 = x \)  
12. \( 49 + x = 60 \)  
13. \( 28 + 4 = x \)  
14. \( 21 + 13 = x \)  
15. \( 23 = 22 + 1 \)  
16. \( 30 + x = 31 \)  
17. \( 15 + 9 = x \)  
18. \( 14 + x = 15 \)  
19. \( 21 + 9 = x \)  
20. \( 11 + x = 12 \)  
21. \( 29 + 9 = x \)  
22. \( 10 + x = 11 \)  
23. \( 13 + x = 14 \)  
24. \( 9 + x = 10 \)  
25. \( 16 + x = 17 \)  
26. \( 8 + x = 9 \)  
27. \( 7 + x = 8 \)  
28. \( 6 + x = 7 \)  
29. \( 5 + x = 6 \)  
30. \( 4 + x = 5 \)  
31. \( 3 + x = 4 \)  
32. \( 2 + x = 3 \)  
33. \( 1 + x = 2 \)  
34. \( 0 + x = 1 \)  
35. \( -1 + x = 0 \)  
36. \( -2 + x = -1 \)  
37. \( -3 + x = -2 \)  
38. \( -4 + x = -3 \)  
39. \( -5 + x = -4 \)  

6-2 Enrichment

Extension Masters, p. 42

6-1 Enrichment

Math Enrichment Handouts

The enrichment masters are self-contained and can be used as a source of additional practice for students who have mastered a lesson or as enrichment for students who need more challenging work. These masters are designed to help students develop deeper understanding and appreciation of mathematics. Each master contains a variety of problems that require students to think critically and creatively. The problems are intended to be open-ended, allowing for multiple approaches and solutions. Students are encouraged to work independently or in small groups, discussing their strategies and solutions with peers. The enrichment masters are an excellent resource for extending the learning experience beyond the classroom.