

Example 1 Solve each equation. Check your solution.

11. $3t + 7 = -8$

12. $8 = 16 + 8n$

13. $-34 = 6m - 4$

14. $9x + 27 = -72$

15. $\frac{y}{5} - 6 = 8$

16. $\frac{f}{-7} - 8 = 2$

17. $1 + \frac{r}{9} = 4$

18. $\frac{k}{3} + 4 = -16$

19. $\frac{n-2}{7} = 2$

20. $14 = \frac{6+z}{-2}$

21. $-11 = \frac{a-5}{6}$

22. $\frac{22-w}{3} = -7$

Example 2

- 23 FINANCIAL LITERACY** The Cell+ Cellular Phone store offers the plans shown in the table. Raul chose the business plan and has budgeted \$100 per month. Write an equation for this situation, and determine how many minutes per month he can use the phone and stay within budget.

Plan	Flat Monthly Fee	Anytime Minutes	Cost per Minute After Anytime Minutes
personal	\$29.99	250	\$0.20
business	\$49.99	650	\$0.15
executive	\$59.99	1200	\$0.10

Example 3

Write an equation and solve each problem.

24. Fourteen less than three fourths of a number is negative eight. Find the number.
25. Seventeen is thirteen subtracted from six times a number. What is the number?
26. Find three consecutive even integers with the sum of -84 .
27. Find three consecutive odd integers with the sum of 141 .
28. Find four consecutive integers with the sum of 54 .
29. Find four consecutive integers with the sum of -142 .

Solve each equation. Check your solution.

30. $-6m - 8 = 24$

31. $45 = 7 - 5n$

32. $\frac{2b}{3} + 6 = 24$

33. $\frac{5x}{9} - 11 = -51$

34. $65 = \frac{3}{4}c - 7$

35. $9 + \frac{2}{3}x = 81$

36. $-\frac{5}{2} = \frac{3}{4}z + \frac{1}{2}$

37. $\frac{5}{6}k + \frac{2}{3} = \frac{4}{3}$

38. $-\frac{1}{5} - \frac{4}{9}a = \frac{2}{15}$

39. $-\frac{3}{7} = \frac{3}{4} - \frac{b}{2}$

Write an equation and solve each problem.

40. **CCSS REASONING** The ages of three brothers are consecutive integers with the sum of 96 . How old are the brothers?



41. **VOLCANOES** Moving lava can build up and form beaches at the coast of an island. The growth of an island in a seaward direction may be modeled as $8y + 2$ centimeters, where y represents the number of years that the lava flows. An island has expanded 60 centimeters seaward. How long has the lava flowed?

