

2-4 Practice**Solving Multi-Step Equations**

Show Steps
and
Check

Solve each problem by working backward.

- Three is added to a number, and then the sum is multiplied by 4. The result is 16. Find the number.
- A number is divided by 4, and the quotient is added to 3. The result is 24. What is the number?
- Two is subtracted from a number, and then the difference is multiplied by 5. The result is 30. Find the number.
- BIRD WATCHING** While Michelle sat observing birds at a bird feeder, one fourth of the birds flew away when they were startled by a noise. Two birds left the feeder to go to another stationed a few feet away. Three more birds flew into the branches of a nearby tree. Four birds remained at the feeder. How many birds were at the feeder initially?

Solve each equation. Then check your solution.

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| 5. $-12n - 19 = 77$ | 6. $17 + 3f = 14$ | 7. $15t + 4 = 49$ |
| 8. $\frac{u}{5} + 6 = 2$ | 9. $\frac{d}{-4} + 3 = 15$ | 10. $\frac{b}{3} - 6 = -2$ |
| 11. $\frac{1}{2}y - \frac{1}{8} = \frac{7}{8}$ | 12. $-32 - \frac{3}{5}f = -17$ | 13. $8 - \frac{3}{8}k = -4$ |
| 14. $\frac{r + 13}{12} = 1$ | 15. $\frac{15 - a}{3} = -9$ | 16. $\frac{3k - 7}{5} = 16$ |
| 17. $\frac{x}{7} - 0.5 = 2.5$ | 18. $2.5g + 0.45 = 0.95$ | 19. $0.4m - 0.7 = 0.22$ |

Write an equation and solve each problem.

- Seven less than four times a number equals 13. What is the number?
- Find two consecutive odd integers whose sum is 116.
- Find two consecutive even integers whose sum is 126.
- Find three consecutive odd integers whose sum is 117.
- COIN COLLECTING** Jung has a total of 92 coins in his coin collection. This is 8 more than three times the number of quarters in the collection. How many quarters does Jung have in his collection?