

6.3 Writing Two-Step Equations

Practice and Problem Solving: D

Model each two-step equation by drawing algebra tiles.
The first one is done for you.

1. $2p + 3 = 7$

2. $3t + 10 = 16$

3. $-q - 3 = 7$

Write an equation for each word problem. The first one is done for you.

4. The sum of three times a number d and 5 is 17. What is the number?

5. As a membership fee, a health club charges a one-time amount of \$40 and charges \$25 for each month. The total fee after m months is \$240. What is the value of m ?

6. A runner warms up for ten minutes and then takes seven minutes to run each mile. The total time after r miles is 45 minutes. How many miles are run?

6.4 Solving Two-Step Equations

Practice and Problem Solving: D

Tell how to solve each two-step equation. Then solve it. The first one is done for you.

1. $5x + 3 = 33$

2. $8y - 1 = 31$

3. $\frac{1}{2}z + 5 = 11$

4. $15 - 4t = 3$

5. $\frac{1}{3}(q + 3) = 5$

Solve. Check each answer.

6. $2m + 7 = 9$

7. $3p - 5 = 19$

Write an equation to represent the problem. Then solve the problem. The first one is done for you.

8. When 3 is subtracted from two times a number, the result is 17.
What is the number?

9. The sum of half a number and 5 is 9. What is the number?

10. The sum of 15 and two times a number is 29. What is the number?
