

2-2 Practice**Solving One-Step Equations**

Solve each equation. Check your solution.

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 1. $d - 8 = 17$ | 2. $v + 12 = -5$ | 3. $b - 2 = -11$ |
| 4. $-16 = m + 71$ | 5. $29 = a - 76$ | 6. $-14 + y = -2$ |
| 7. $8 - (-n) = 1$ | 8. $78 + r = -15$ | 9. $f + (-3) = -9$ |
| 10. $8j = 96$ | 11. $-13z = -39$ | 12. $-180 = 15m$ |
| 13. $243 = 27r$ | 14. $\frac{y}{9} = -8$ | 15. $-\frac{j}{12} = -8$ |
| 16. $\frac{a}{15} = \frac{4}{5}$ | 17. $\frac{g}{27} = \frac{2}{9}$ | 18. $\frac{q}{24} = \frac{1}{6}$ |

Write an equation for each sentence. Then solve the equation.

19. Negative nine times a number equals -117 .
20. Negative one eighth of a number is $-\frac{3}{4}$.
21. Five sixths of a number is $-\frac{5}{9}$.
22. 2.7 times a number equals 8.37.
23. **HURRICANES** The day after a hurricane, the barometric pressure in a coastal town has risen to 29.7 inches of mercury, which is 2.9 inches of mercury higher than the pressure when the eye of the hurricane passed over.
- Write an addition equation to represent the situation.
 - What was the barometric pressure when the eye passed over?
24. **ROLLER COASTERS** *Kingda Ka* in New Jersey is the tallest and fastest roller coaster in the world. Riders travel at an average speed of 61 feet per second for 3118 feet. They reach a maximum speed of 187 feet per second.
- If x represents the total time that the roller coaster is in motion for each ride, write an expression to represent the situation. (*Hint*: Use the distance formula $d = rt$.)
 - How long is the roller coaster in motion?