

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.

a. Write an addition equation to represent the situation.

b. 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.

a. 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 $d = rt$.)

b. How long is the roller coaster in motion?