

Practice B

For use with pages 145–152

Check whether the given number is a solution of the equation.

1. $7 - 2x = 15; -4$

2. $4(x - 3) = -24; -3$

3. $5x - 8x + 7 = 22; -5$

4. $\frac{x}{8} + 6 = -12; -48$

5. $\frac{3}{5}x - 9 = -3; -20$

6. $\frac{1}{2}(4x - 8) = 8; -2$

Solve the equation.

7. $3x + 5 = 32$

8. $5x - 14 = 21$

9. $\frac{x}{2} - 3 = -4$

10. $\frac{x}{-3} + 14 = 8$

11. $\frac{3}{4}x - \frac{3}{4} = 0$

12. $\frac{2x}{3} + 9 = -7$

13. $2x - 3x = 11$

14. $-4x + 9x = -30$

15. $6 = 7x + x$

16. $4x + 3x - 9 = 5$

17. $11x - 3x = 12 - 20$

18. $-2(x - 4) = 2$

19. $\frac{3}{4}(x + 2) = -1$

20. $4 = \frac{2}{3}x + 9 - \frac{1}{3}x$

21. $10 = -\frac{2}{3}(4x + 5)$

22. $-8 = \frac{1}{3}x + x$

23. $5x + 4 - 8x = 13$

24. $3x + 2(x + 5) = 15$

25. $4x - (2x + 3) = 7$

26. $x - (3x - 9) = -5$

27. $13x - 4(2x - 5) = 15$

In Exercises 28–30, write and solve an equation to answer the question.

28. **Piano Keyboard** The keyboard of a piano has seven full octaves plus two extra white keys and one extra black key. There are 36 black keys on a piano. How many black keys are there in one octave?



Part of a keyboard

29. **Band Fundraiser** Your school band needs to buy new percussion equipment. The equipment will cost \$2450. You have collected \$812 in previous fundraisers. If you sell sandwiches at \$3.50 each, how many sandwiches will you need to sell to raise the remaining funds?

Cost per sandwich	·	Number of sandwiches sold	+	Money already raised	=	Cost of equipment
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30. **Wrapping a Package** It takes 64 inches of ribbon to make a bow and wrap the ribbon around a box. The bow takes 30 inches of ribbon. The width of the box is 12 inches. What is the height of the box?

