

Check Your Understanding

Step-by-Step Solutions begin on page R13.

Go Online! Self-Check

Examples 1-3 Solve each equation. Check your solution.

TEKS A.5(A)

1. $13x + 2 = 4x + 38$

3. $6(n + 4) = -18$

5. $5 + 2(n + 1) = 2n$

7. $14v + 6 = 2(5 + 7v) - 4$

2. $\frac{2}{3} + \frac{1}{6}q = \frac{5}{6}q + \frac{1}{3}$

4. $7 = -11 + 3(b + 5)$

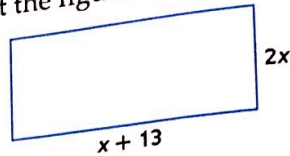
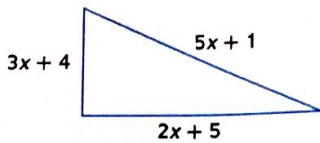
6. $7 - 3r = r - 4(2 + r)$

8. $5h - 7 = 5(h - 2) + 3$

Example 4

TEKS A.5(A)

9. MULTIPLE CHOICE Find the value of x so that the figures have the same perimeter.



A 4

B 5

C 6

D 7

Practice and Problem Solving

Extra Practice is on page R2.

Examples 1-3 Solve each equation. Check your solution.

TEKS A.5(A)

10. $7c + 12 = -4c + 78$

12. $9x - 4 = 2x + 3$

14. $\frac{b-4}{6} = \frac{b}{2}$

16. $8 = 4(r + 4)$

18. $5(g + 8) - 7 = 103$

20. $3(3m - 2) = 2(3m + 3)$

11. $2m - 13 = -8m + 27$

13. $6 + 3t = 8t - 14$

15. $\frac{5v-4}{10} = \frac{4}{5}$

17. $6(n + 5) = 66$

19. $12 - \frac{4}{5}(x + 15) = 4$

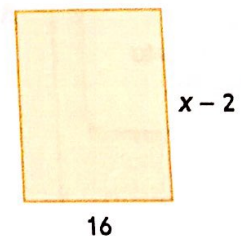
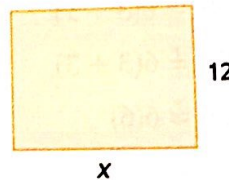
21. $6(3a + 1) - 30 = 3(2a - 4)$

Example 4

TEKS A.5(A)

22. GEOMETRY Find the value of x so the rectangles have the same area.

23. NUMBER THEORY Four times the lesser of two consecutive even integers is 12 less than twice the greater number. Find the integers.



24. MP ORGANIZE IDEAS Two times the least of three consecutive odd integers exceeds three times the greatest by 15. What are the integers?

Solve each equation. Check your solution.

25. $2x = 2(x - 3)$

27. $-5(3 - q) + 4 = 5q - 11$

29. $\frac{3}{5}f + 24 = 4 - \frac{1}{5}f$

31. $\frac{2m}{5} = \frac{1}{3}(2m - 12)$

33. $6.78j - 5.2 = 4.33j + 2.15$

35. $3.2k - 4.3 = 12.6k + 14.5$

26. $\frac{2}{5}h - 7 = \frac{12}{5}h - 2h + 3$

28. $2(4r + 6) = \frac{2}{3}(12r + 18)$

30. $\frac{1}{12} + \frac{3}{8}y = \frac{5}{12} + \frac{5}{8}y$

32. $\frac{1}{8}(3d - 2) = \frac{1}{4}(d + 5)$

34. $14.2t - 25.2 = 3.8t + 26.8$

36. $5[2p - 4(p + 5)] = 25$