

Check Your Understanding

Examples 1 and 3

pp. 83–85

Solve each equation. Check your solution.

1. $g + 5 = 33$
2. $104 = y - 67$
3. $\frac{2}{3} + w = 1\frac{1}{2}$
4. $-4 + t = -7$
5. $a + 26 = 35$
6. $-6 + c = 32$
7. $1.5 = y - (-5.6)$
8. $3 + g = \frac{1}{4}$
9. $x + 4 = \frac{3}{4}$
10. $\frac{t}{7} = -5$
11. $\frac{a}{36} = \frac{4}{9}$
12. $\frac{2}{3}n = 10$
13. $\frac{8}{9} = \frac{4}{5}k$
14. $12 = \frac{x}{-3}$
15. $-\frac{r}{4} = \frac{1}{7}$

Example 4

p. 85

16. **FUNDRAISING** The television show “Idol Gives Back” raised money for relief organizations. During this show, viewers could call in and vote for their favorite performer. The parent company contributed \$5 million for the 50 million votes cast. What did they pay for each vote?

17. **SHOPPING** Hana decides to buy her cat a bed from an online fund that gives $\frac{7}{8}$ of her purchase to shelters that care for animals. How much of Hana’s money went to the animal shelter?

Online Price: \$26.00

[Add to Cart](#)



blue



yellow



Practice and Problem Solving

 = **Step-by-Step Solutions** begin on page R12.
Extra Practice begins on page 815.

Examples 1 and 3

pp. 83–85

Solve each equation. Check your solution.

18. $v - 9 = 14$
19. $44 = t - 72$
20. $-61 = d + (-18)$
21. $18 + z = 40$
22. $-4a = 48$
23. $12t = -132$
24. $18 - (-f) = 91$
25. $-16 - (-t) = -45$
26. $\frac{1}{3}v = -5$
27. $\frac{u}{8} = -4$
28. $\frac{a}{6} = -9$
29. $-\frac{k}{5} = \frac{7}{5}$
30. $\frac{3}{4} = w + \frac{2}{5}$
31. $-\frac{1}{2} + a = \frac{5}{8}$
32. $-\frac{t}{7} = \frac{1}{15}$
33. $-\frac{5}{7} = y - 2$
34. $v + 914 = -23$
35. $447 + x = -261$
36. $-\frac{1}{7}c = 21$
37. $-\frac{2}{3}h = -22$
38. $\frac{3}{5}q = -15$
39. $\frac{n}{8} = -\frac{1}{4}$
40. $\frac{c}{4} = -\frac{9}{8}$
41. $\frac{2}{3} + r = -\frac{4}{9}$

Example 4

p. 85

42. **CATS** A domestic cat can run at speeds of 27.5 miles per hour when chasing prey. A cheetah can run 42.5 miles per hour faster when chasing prey. How fast can the cheetah go?

43. **CARS** The average time t it takes to manufacture a car in the United States is 24.9 hours. This is 8.1 hours longer than the average time it takes to manufacture a car in Japan. Write and solve an equation to find the average time in Japan.