

**SOLVING EQUATIONS** Solve the equation. Check your solution.

27.  $5.6 = 1.1p + 1.2$

28.  $7.2y + 4.7 = 62.3$

29.  $1.2j - 4.3 = 1.7$

30.  $16 - 2.4d = -8$

31.  $14.4m - 5.1 = 2.1$

32.  $-5.3 = 2.2v - 8.6$

33.  $\frac{c}{5.3} + 8.3 = 11.3$

34.  $3.2 + \frac{x}{2.5} = 4.6$

35.  $-1.2 = \frac{z}{4.6} - 2.7$

36. **CHALLENGE** Solve the equations  $3x + 2 = 5$ ,  $3x + 2 = 8$ , and  $3x + 2 = 11$ . Predict the solution of the equation  $3x + 2 = 14$ . *Explain.*

**PROBLEM SOLVING**

**EXAMPLE 4**

on p. 143  
for Exs. 37–40

37. **DANCE CLASSES** A dance academy charges \$24 per class and a one-time registration fee of \$15. A student paid a total of \$687 to the academy. Find the number of classes the student took.

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38. **CAR REPAIR** Tyler paid \$124 to get his car repaired. The total cost for the repairs was the sum of the amount paid for parts and the amount paid for labor. Tyler was charged \$76 for parts and \$32 per hour for labor. Find the amount of time it took to repair his car.

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39. **ADVERTISING** A science museum wants to promote an upcoming exhibit by advertising on city buses for one month. The costs of the two types of advertisements being considered are shown. The museum has budgeted \$6000 for the advertisements. The museum decides to have 1 full bus wrap advertisement. How many half-side advertisements can the museum have?



40. **TAKS REASONING** A skateboarding park charges \$7 per session to skate and \$4 per session to rent safety equipment. Jared rents safety equipment every time he skates. During one year, he spends \$99 for skating charges and equipment rentals. Which equation can be used to find  $x$ , the number of sessions Jared attended?

- (A)  $99 = 7x$       (B)  $99 = 7x + 4x$       (C)  $99 = 7x + 4$       (D)  $99 = 4x + 7$

41. **TAKS REASONING** A guitar store offers a finance plan where you give a \$50 down payment on a guitar and pay the remaining balance in 6 equal monthly payments. You have \$50 and you can afford to pay up to \$90 per month for a guitar. Can you afford a guitar that costs \$542? *Explain.*