22. ⬧ **TAKS REASONING** What is the correct factorization of $8x^2 - 10x + 3$?

  A $(2x - 3)(4x - 1)$ **B** $(2x - 1)(4x - 3)$

  C $(4x + 1)(2x - 3)$ **D** $(8x - 3)(x - 1)$

SOLVING EQUATIONS Solve the equation.

23. $2x^2 - 3x - 35 = 0$ **24.** $3w^2 + 22w + 7 = 0$ **25.** $4s^2 + 11s - 3 = 0$

26. $7a^2 + 2a = 5$ **27.** $8t^2 - 2t = 3$ **28.** $6m^2 - 5m = 14$

29. $b(20b - 3) - 2 = 0$ **30.** $4(3y^2 - 7y + 4) = 1$ **31.** $p(3p + 14) = 5$

32. $4n^2 - 2n - 90 = 0$ **33.** $10c^2 - 14c + 4 = 0$ **34.** $-16k^2 + 8k + 24 = 0$

35. $6r^2 - 15r = 99$ **36.** $56z^2 + 2 = 22z$ **37.** $30x^2 + 25x = 20$

ERROR ANALYSIS *Describe* and correct the error in solving the equation.

38.

$5x^2 + x = 4$

$x(5x + 1) = 4$

$x = 4$ or $5x + 1 = 4$

$x = 4$ or $x = \dfrac{3}{5}$

39.

$12x^2 + 5x - 2 = 0$

$(3x - 1)(4x + 2) = 0$

$3x - 1 = 0$ or $4x + 2 = 0$

$x = \dfrac{1}{3}$ or $x = -\dfrac{1}{2}$

40. ✦ **GEOMETRY** The length of a rectangle is 7 inches more than 5 times its width. The area of the rectangle is 6 square inches. What is the width?

41. ⬧ **TAKS REASONING** The length of a rectangle is 1 inch more than 4 times its width. The area of the rectangle is 3 square inches. What is the perimeter of the rectangle? *Explain* how you found your answer.

FINDING ZEROS OF FUNCTIONS Find the zeros of the polynomial function.

42. $g(x) = 2x^2 + x - 1$ **43.** $f(x) = -x^2 + 12x - 35$ **44.** $h(x) = -3x^2 + 2x + 5$

45. $f(x) = 3x^2 + x - 14$ **46.** $g(x) = 8x^2 - 6x - 14$ **47.** $f(x) = 12x^2 - 24x - 63$

SOLVING EQUATIONS Multiply each side of the equation by an appropriate power of 10 to obtain integer coefficients. Then solve the equation.

48. $0.3x^2 - 0.7x - 4.0 = 0$ **49.** $0.8x^2 - 1.8x - 0.5 = 0$ **50.** $0.4x^2 - 0.4x = 9.9$

51. ⬧ **TAKS REASONING** What are the solutions of the equation $0.4x^2 - 1.1x = 2$?

  A -12.5 and 40 **B** -4 and 1.25 **C** -1.25 and 4 **D** -0.125 and 0.4

WRITING EQUATIONS Write a polynomial equation that has the given solutions. The equation must have integer coefficients. *Explain* your reasoning.

52. -3 and 2 **53.** $-\dfrac{1}{2}$ and 5 **54.** $-\dfrac{3}{4}$ and $-\dfrac{1}{3}$

CHALLENGE Factor the trinomial.

55. $2x^2 - 11xy + 5y^2$ **56.** $3x^2 + 2xy - 8y^2$ **57.** $6x^3 - 10x^2y - 56xy^2$