

# Homework

p.456: 23, 31, 34, 35, 44, 45, 46

**EQUATIONS WITH RATIONAL EXPONENTS** Solve the equation. Check your solution.

23.  $2x^{2/3} = 32$

31.  $(3x + 43)^{2/3} + 22 = 38$

**SOLVING RADICAL EQUATIONS** Solve the equation. Check for extraneous solutions.

34.  $x - 6 = \sqrt{3x}$

35.  $x - 10 = \sqrt{9x}$

44. **★ SHORT RESPONSE** Explain how you can tell that  $\sqrt{x + 4} = -5$  has no solution without solving it.

**EQUATIONS WITH TWO RADICALS** Solve the equation. Check for extraneous solutions.

45.  $\sqrt{4x + 1} = \sqrt{x + 10}$

46.  $\sqrt[3]{12x - 5} - \sqrt[3]{8x + 15} = 0$