

Homework

p. 425: 47, 49, 53-59 (odds),
60, 63, 64

VARIABLE EXPRESSIONS Simplify the expression. Assume all variables are positive.

47. $\frac{x^{2/5}y}{xy^{-1/3}}$

49. $(\sqrt[3]{x^2} \cdot \sqrt[6]{x^4})^{-3}$

SIMPLEST FORM Write the expression in simplest form. Assume all variables are positive.

53. $\sqrt[4]{12x^2y^6z^{12}}$

55. $\sqrt{x^2yz^3} \cdot \sqrt{x^3z^5}$

57. $\sqrt[3]{\frac{x^3}{y^4}}$

59. $\frac{\sqrt[4]{x^6}}{\sqrt[7]{x^5}}$

COMBINING VARIABLE EXPRESSIONS Perform the indicated operation. Assume all variables are positive.

60. $3\sqrt[5]{x} + 9\sqrt[5]{x}$

63. $(x^4y)^{1/2} + (xy^{1/4})^2$

64. $x\sqrt{9x^3} - 2\sqrt{x^5}$

****Never leave radicals or rational exponents in the denominator**