

MATH 100/101  
ADDITIONAL PROBLEMS FOR P.3

Write each radical expression in simplified form. Assume that all variables represent positive real numbers.

$$(1) \sqrt{72}$$

$$(2) \sqrt{50}$$

$$(3) \sqrt{\frac{3}{7}}$$

$$(4) \sqrt{\frac{x}{8}}$$

$$(5) \frac{7}{\sqrt{7}}$$

$$(6) \sqrt[5]{\frac{3}{8}}$$

$$(7) \sqrt[4]{162}$$

$$(8) \sqrt[3]{54}$$

$$(9) \sqrt[3]{-81x^4}$$

$$(10) \sqrt[3]{-32a^5}$$

$$(11) \sqrt[5]{\frac{1}{27}}$$

$$(12) \sqrt[3]{\frac{3x}{25}}$$

$$(13) \sqrt{50} + \sqrt{72} - \sqrt{2}$$

$$(14) \sqrt[3]{24x} - \sqrt[3]{81x}$$

$$(15) \sqrt{20x^3} + \sqrt{45x^3}$$

$$(16) (-3\sqrt{2})(-2\sqrt{3})$$

$$(17) (3\sqrt{5a})(4\sqrt{5a})$$

$$(18) \sqrt{18a} \div \sqrt{2a^4}$$

$$(19) 5 \div \sqrt{x}$$