

## #9 ~ Sect. 7.2: Dividing Radical Expressions

Property: Dividing Radical Expressions

$$\text{If } \sqrt[n]{a} \text{ and } \sqrt[n]{b} \text{ are real numbers and } b \neq 0, \text{ then } \frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}.$$

Ex. 1: Divide and simplify. Assume all variables are positive.

a)  $\frac{\sqrt[3]{-81}}{\sqrt[3]{3}} =$

b)  $\frac{\sqrt[3]{192x^8}}{\sqrt[3]{3x}} =$

Ex. 2: Rationalize the denominator of each expression. Assume all variables are positive.

a)  $\frac{\sqrt{3}}{\sqrt{5}} =$

b)  $\sqrt[3]{\frac{5}{4y}} =$