

Today's Learning Goal(s):

Date: _____

By the end of the class, I will be able to:

- a) simplify algebraic expressions containing rational exponents and radicals.

Last day's work: **READ p.228**

pp. 229-230 # $(1 - 6)$ ace, 8 – 11, 12ace, 14 [16]

4.4 Simplifying Algebraic Expressions Involving Exponents

Date: _____

Ex.1 Simplify. Express answers in rational form with positive exponents.

a)
$$\frac{(3x^{-2}y^2)^2}{(x^3y^{-2})^3}$$

Recall:



b)
$$\frac{(64a^{-6}b^{12})^{\frac{1}{3}}}{(16a^{-4}b^6)^{\frac{1}{2}}}$$

c)
$$\frac{b^{-4}}{a^{-2}}$$

d)
$$\frac{\sqrt[6]{x^8}}{\sqrt[3]{x^5}}$$



Ex.2 Simplify and evaluate for $x = -3$ and $n = -2$.

$$\frac{(x^{3n+1})(x^{5n-3})}{(x^{6n-3})}$$



Extra, if time.

$$\left(\frac{\left(x^{18} \right)^{-\frac{1}{6}}}{\sqrt[5]{243x^{10}}} \right)^{0.5}$$



Are there any Homework Questions you would like to see on the board?

Last day's work: **READ p.228**

pp. 229-230 # $(1 - 6)$ ace, 8 – 11, 12ace, 14 [16]

The mid-chapter review is good practice for tomorrow's quiz!

QUIZ Tomorrow

Today's Homework Practice includes:

pp. 235-237 # $(1 - 2)$ ace, 3, $(4 - 9)$ ace [14]

Review p. 239