Daily Agenda

Learning Target: I can simplify rational exponents.

Course Recommendations; Elective Fair

Homework
7.1 Day 2 WS
need to do HW w/o calc or table

Assessments
7.1 Quiz - 1/18
No Calculator

Make friendship a fine art.
-John Wooden

Nov 15-8:24 PM

Required
Honors PreCalculus
Or
PreCalculus

Optional
AP Computer Science
AP Statistics

Jan 6-11:01 AM

7.1 Properties of Rational Exponents

$x^{-a} = \frac{1}{x^a}$

$\left(\frac{x}{y}\right)^{-a} = \frac{y^a}{x^a}$

$x^{a/b} = \sqrt[b]{x^a}$

$a^0 = 1$

$0^0 = undefined$

Sep 15-10:27 PM

Simplify. Write answers with positive exponents.

$6x^5 \bullet 3x^{-2}$

$6x^5 \cdot \frac{3}{x^2}$

$\frac{18x^5}{x^2} = 18x^3$

$(4x^3)^2(-2x^{-3}y^{-1})^3$

$16x^6 \bullet -8x^{-9}y^{-3}$

$-128x^{-3}y^{-3} = \frac{-128}{x^3y^3}$

Oct 18-7:48 AM

Simplify. Write final answer with positive exponents.

$(7a^{-5}b^6) \div (21a^4b^{-2})$

$\frac{7a^{-5}b^6}{21a^4b^{-2}} = \frac{1a^9b^8}{3} = \frac{b^8}{3a^9}$

Oct 18-7:48 AM

Simplify. Write final answer with positive exponents.

$\frac{13x^5y^{-2}z^0}{39xy^{-3}z^2} = \frac{x^4y}{3z^2}$

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Simplify. Write final answer with positive exponents.

$\left(4x^{-1/2}\right)^3 \div \left(9x^{1/3}\right)^{-3/2} = \dfrac{\left(4x^{-1/2}\right)^3}{\left(9x^{1/3}\right)^{-3/2}}$

$\dfrac{64x^{-3/2}}{9^{-3/2} \cdot x^{-1/2}} = \dfrac{64x^{-3/2}}{(3^2)^{-3/2} x^{-1/2}} = \dfrac{64x^{-3/2}}{3^{-3} x^{-1/2}} =$

$\dfrac{64 \cdot 3^3 \cdot x^{-3/2}}{x^{-1/2}} = 64 \cdot 27 x^{-1} = \dfrac{1728}{x}$

Oct 18-7:48 AM