Math Virtual Learning

Algebra 1 S1
Radical and Rational exponents-Part 1

May 18, 2020

Algebra I S1
Lesson: May 18, 2020

Objective/Learning Target:
Students will convert radical exponents to rational (exponential) form.

VIDEO # 1:

https://www.youtube.com/watch?v=L5Z_3RrrVjA

VIDEO # 2:

https://www.youtube.com/watch?v=gqNMJe2THLY&t=250s

Write each expression in exponential form.

7) $\left(\sqrt{10}\right)^3$

8) $\sqrt[6]{2}$

9) $\left(\sqrt[4]{2}\right)^5$

10) $\left(\sqrt[4]{5}\right)^5$

11) $\sqrt[3]{2}$

12) $\sqrt[6]{10}$

Write each expression in exponential form.

19) $\left(\sqrt[4]{m}\right)^3$

20) $\left(\sqrt[3]{6x}\right)^4$

21) $\sqrt[4]{v}$

22) $\sqrt{6p}$

23) $\left(\sqrt[3]{3a}\right)^4$

24) $\dfrac{1}{\left(\sqrt{3k}\right)^5}$

Write each expression in exponential form.

7) $\left(\sqrt{10}\right)^3$

$10^{\frac{3}{2}}$

8) $\sqrt[6]{2}$

$2^{\frac{1}{6}}$

9) $\left(\sqrt[4]{2}\right)^5$

$2^{\frac{5}{4}}$

10) $\left(\sqrt[4]{5}\right)^5$

$5^{\frac{5}{4}}$

11) $\sqrt[3]{2}$

$2^{\frac{1}{3}}$

12) $\sqrt[6]{10}$

$10^{\frac{1}{6}}$

Write each expression in exponential form.

19) $\left(\sqrt[4]{m}\right)^3$

$m^{\frac{3}{4}}$

20) $\left(\sqrt[3]{6x}\right)^4$

$(6x)^{\frac{4}{3}}$

21) $\sqrt[4]{v}$

$v^{\frac{1}{4}}$

22) $\sqrt{6p}$

$(6p)^{\frac{1}{2}}$

23) $\left(\sqrt[3]{3a}\right)^4$

$(3a)^{\frac{4}{3}}$

24) $\dfrac{1}{\left(\sqrt{3k}\right)^5}$

$(3k)^{-\frac{5}{2}}$