Inspiring Greatness

ISD

INDEPENDENCE SCHOOL DISTRICT

Math Virtual Learning

Algebra 1 S1

Radical and Rational exponents-Part 2

May 19, 2020

Algebra I S1
Lesson: May 19, 2020

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

BELL RINGER

Write each expression in exponential form.

5) $\dfrac{1}{(\sqrt{6x})^3}$

6) $\sqrt{v}$

7) $\dfrac{1}{(\sqrt[4]{n})^7}$

8) $\sqrt{5a}$

BELL RINGER-ANSWERS

5) $(6x)^{-\frac{3}{2}}$

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

7) $n^{-\frac{7}{4}}$

8) $(5a)^{\frac{1}{2}}$

Converting Rational Form Videos

VIDEO # 1: Converting a rational exponent to radical form

https://www.youtube.com/watch?v=-rzQQExcXoY

VIDEO # 2: Rewriting a rational exponent to radical form

https://www.youtube.com/watch?v=-VqV-NI7QvQ

PRACTICE TIME-PART 2-1

Write each expression in radical form.

1) $(5n)^{\frac{1}{4}}$

2) $n^{\frac{3}{2}}$

3) $(3b)^{\frac{1}{2}}$

4) $(6x)^{\frac{5}{2}}$

5) $(4b)^{\frac{4}{3}}$

6) $(5x)^{\frac{7}{4}}$

PRACTICE TIME-PART 2-2

7) $(4n)^{\frac{2}{3}}$

8) $x^{\frac{2}{5}}$

9) $(7p)^{\frac{5}{3}}$

10) $(5b)^{\frac{5}{4}}$

11) $(2n)^{\frac{3}{2}}$

12) $(5r)^{\frac{5}{2}}$

PRACTICE TIME-PART 2-1 ANSWERS

Write each expression in radical form.

1) $(5n)^{\frac{1}{4}}$

$\sqrt[4]{5n}$

2) $n^{\frac{3}{2}}$

$(\sqrt{n})^3$

3) $(3b)^{\frac{1}{2}}$

$\sqrt{3b}$

4) $(6x)^{\frac{5}{2}}$

$(\sqrt{6x})^5$

5) $(4b)^{\frac{4}{3}}$

$(\sqrt[3]{4b})^4$

6) $(5x)^{\frac{7}{4}}$

$(\sqrt[4]{5x})^7$

PRACTICE TIME-PART 2-2 ANSWERS

7) $(4n)^{\frac{2}{3}}$

$(\sqrt[3]{4n})^2$

8) $x^{\frac{2}{5}}$

$(\sqrt[5]{x})^2$

9) $(7p)^{\frac{5}{3}}$

$(\sqrt[3]{7p})^5$

10) $(5b)^{\frac{5}{4}}$

$(\sqrt[4]{5b})^5$

11) $(2n)^{\frac{3}{2}}$

$(\sqrt{2n})^3$

12) $(5r)^{\frac{5}{2}}$

$(\sqrt{5r})^5$