

ALG2

JANUARY 30, 2012

NOTHING TO CORRECT... GET OUT YOUR NOTES



1/30 - n^{th} Roots and Rational Exponents

$$\begin{aligned} &\overset{\rightarrow}{\sqrt[3]{64}} \\ &= 4 \end{aligned}$$

because

$$\overset{\rightarrow}{4^3} = 64$$

$$\begin{aligned} &\overset{\rightarrow}{\sqrt[4]{81}} \\ &= 3 \end{aligned}$$

because

$$\overset{\rightarrow}{3^4} = 81$$

$$\sqrt[5]{-32}$$

$$= -2$$

$$\begin{aligned} &-2 \cdot -2 \cdot -2 \cdot -2 \cdot -2 \\ &= -32 \end{aligned}$$

$$25^{\frac{1}{2}} = 5$$

means
 $\sqrt[2]{25}$

$$16^{\frac{1}{4}} = 2$$

$16 \wedge .25$
on a calculator
means $\sqrt[4]{16}$

$$27^{\frac{1}{3}} = 3$$

$\sqrt[3]{27}$
 $27 \wedge (1/3)$

$$4^{\frac{3}{2}}$$
$$= \sqrt[2]{4^3} = \sqrt[2]{4^3}$$
$$= \sqrt[2]{64} = 2^3$$
$$= 8 = 8$$

$$\frac{6}{2} = 3 \cdot \frac{1}{2}$$
$$= \frac{1}{2} \cdot 3$$

$$8^{\frac{2}{3}}$$
$$= \sqrt[3]{8^2} = \sqrt[3]{8^2}$$
$$= \sqrt[3]{64} = 2^2$$
$$= 4 = 4$$

$$\begin{aligned} &= 9^{-\frac{1}{2}} \\ &= \frac{1}{9^{\frac{1}{2}}} \\ &= \frac{1}{\sqrt{9}} \\ &= \frac{1}{3} \end{aligned}$$

$$\begin{aligned} &= 32^{-\frac{3}{5}} \\ &= \frac{1}{\sqrt[5]{32^3}} \\ &= \frac{1}{2^3} \\ &= \frac{1}{8} \end{aligned}$$

HOMEWORK

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DUE Today