

August 26, 2015  
 \* Quiz #2 - Friday  
 \* Prep Handout  
 - Nat #15 or #22  
 \* MATH #1

Aug 26-10:07 AM

Radical Functions

$f(x) = \sqrt[n]{x}$

Index: {2, 3, 4, ...} Radical Symbol  
 function name  
 variable  
 Radicand

Aug 26-10:10 AM

8.1 Rational Exponents

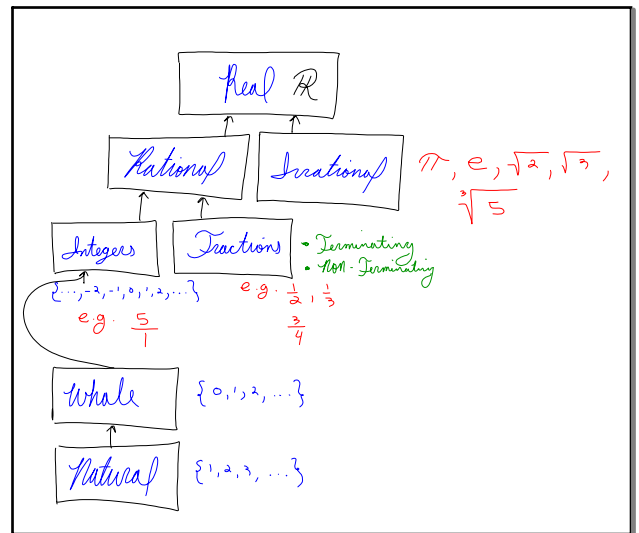
Fractions

$a^{\frac{m}{n}}$  ← Rational Exponent  
 Base  
 $\frac{1}{2} = .5$   
 $.5 \cdot 4 = 2$

$4^{\frac{1}{2}} = \sqrt[2]{4^1} = 2$   
 Base → Radicand

Meaning of Exponents  
 $x^2 = x \cdot x = x^{1+1}$   
 same base

Aug 26-10:19 AM



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Def. Exponential Form = Radical Form

$a^{\frac{m}{n}} = \sqrt[n]{a^m}$

$64^{\frac{1}{3}} = \sqrt[3]{64^1}$   
 $= \sqrt[3]{(4)^3}$   
 $= 4$

Aug 26-10:44 AM