Definition:
In mathematics, a **radical expression** is defined as any **expression** containing a **radical** (√) symbol. Many people mistakenly call this a 'square root' symbol, and many times it is used to determine the square root of a number. However, it can also be used to describe a cube root, a fourth root, or higher.

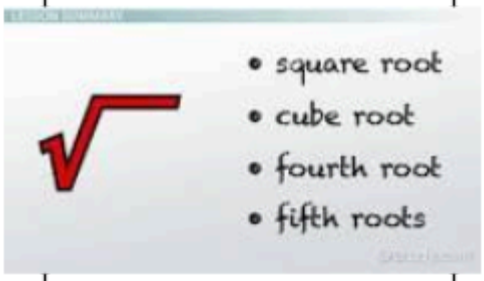
Characteristics: see more....

https://study.com/academy/lesson/radical-expression-definition-examples-quiz.html

Radical Expression
Pg 300 20-1

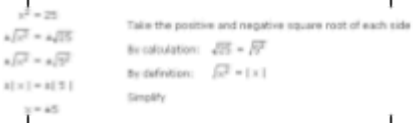
Examples:

Image Representation:



Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
The unique nonnegative **square root** of a nonnegative real number. ... The concept of **principal square root** cannot be extended to real negative numbers since the two **square roots** of a negative number cannot be distinguished until one of the two is defined as the imaginary unit, at which point and can then be distinguished.	
Examples:	Non-Examples:
Image Representation: 	

Principal square root
Pg 300 20-1

Unit 4 vocab

Definition:	Characteristics:
The imaginary number "i" is the **square root** of **negative** one. An imaginary number possesses the unique property that when squared, the result is **negative**. Consider: The process of simplifying a radical containing a **negative** factor is the same as normal radical simplification.	

Negative square root
Pg 300 20-1

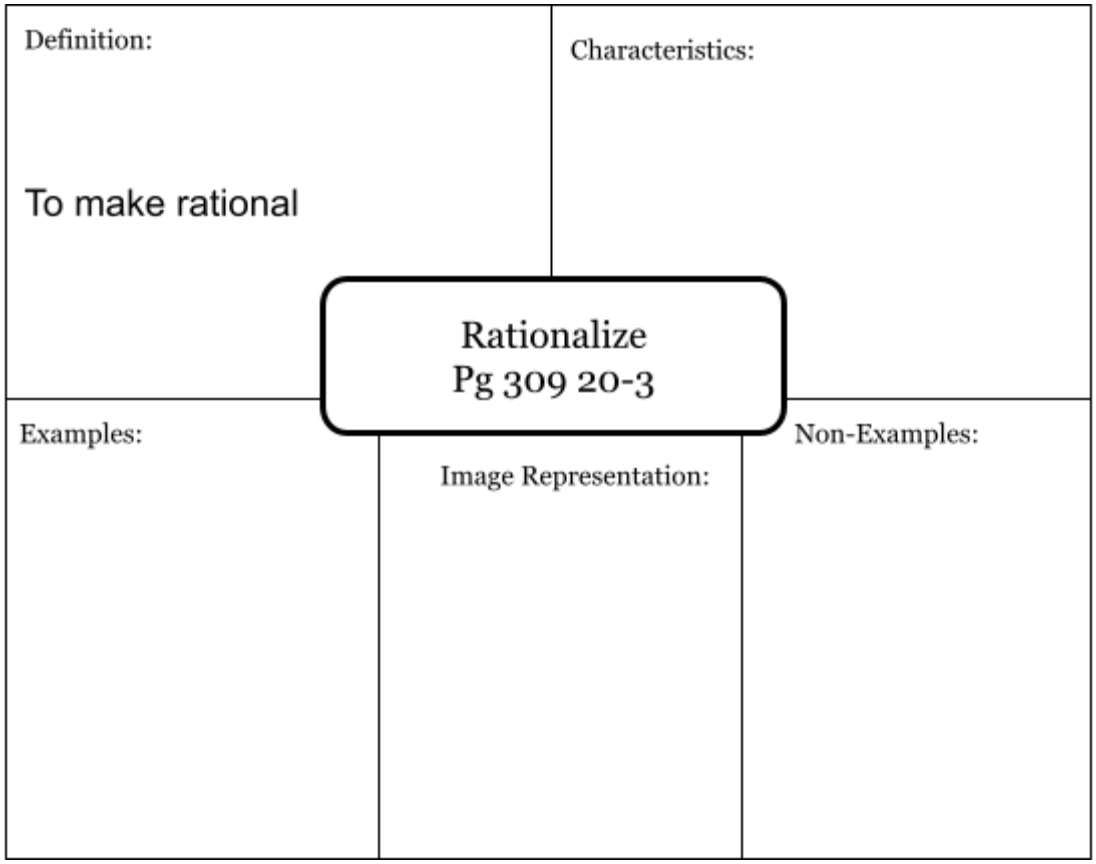
Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
The cube root of a number, n, is the number which when used as a factor three times results in the product,n.	

Cube root
Pg 301 20-1

Examples:	Image Representation:	Non-Examples:
$\sqrt[3]{27} = 3$ $3 \times 3 \times 3 = 27$		


Definition:
To make rational
Characteristics:
Rationalize
Pg 309 20-3
Examples:
Image Representation:
Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A graphic organizer for listing the possible outcomes of an experiment	

Tree diagram
21-1 313

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
A sequence in which the ratio of consecutive terms is a constant	

Geometric sequence
314 pg 21-1

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
The ratio, typically denoted by the letter r, between consecutive terms in a geometric sequence	

Common ratio 314 21-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A sequence in which the difference of consecutive terms is constant	

Arithmetic sequence
21-1 315

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Recursive formula
21-2 316

Definition:	Characteristics:
A formula that gives any term as a function of preceding terms-adds a common difference to the previous term	

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A increase in a quantity due to multiplying by the same factor during each time period. In a growth function, the constant factor is greater than 1.	

Exponential growth
Pg 326 21-2

Examples:	Image Representation:	Non-Examples:
2^x		

Unit 4 vocab

Definition:	Characteristics:
A function of the form $f(x)=a \cdot b^x$, Where a and b are constants, x is the domain, f(X) is the range, and $a \neq 0, b > 0, b \neq 1$	

Exponential function
Pg 326 22-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A decrease in a quantity due to multiplying by the same factor during each time period. In a decay function, the constant factor is greater than 0 but less than 1.	

Exponential decay
Pg 331 22-2

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
Interest calculated on the total principal plus the interest earned or owed during the previous time period.	

Compound interest
Pg 341 23-1

Examples:	Image Representation:	Non-Examples:

Exponential regression
Pg 347 23-2

Definition:

A method used to find an exponential function that models a set of data

Characteristics:

Examples:

$y \sim a * b^x$

Image Representation:

Non-Examples:

Definition:	Characteristics:
A number, a variable, or a product of a number and variable(s).	

Term
Pg 355 24-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A single term or the sum of two or more terms.	

Polynomial
24-1 356

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A number by which a variable is multiplied	

Coefficient
Pg 356 24-1

Examples:	Image Representation:	Non-Examples:
6x- 6 is the coefficient		

Unit 4 vocab

Definition:	Characteristics:
A term in an equation that doesn't change value	

Constant term
356 24-1

Examples:	Image Representation:	Non-Examples:
In y=mx=b- b 3x+8:8		

Unit 4 vocab

Definition:	Characteristics:
The sum of the exponents of the variables contained in the term	

Degree of a term
24-1 356

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
The largest degree of any term in the polynomial	

Degree of a polynomial
357 24-1

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
A way of writing a polynomial so terms are descending order of degree	

Standard form of a polynomial
357 24-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
Terms are arranged in order from largest to smallest	

Descending order
357 24-1

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
The coefficient of the term with the highest degree in a polynomial	

Leading coefficient
357 24-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A number, a variable, or a product of numbers and variables with whole number exponents. 1 term while in simplest form	

Monomial
357 24-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
A sum or difference of two monomials. 2 terms when in simplest form	

Binomial
24-1 3577

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
Has 3 terms when in simplest form	

Trinomial
357 24-1

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
Terms that have the same variable raised to the same power	

Like terms
24-2 361

Examples:	Image Representation:	Non-Examples:

Definition:

A polynomial with the form of $a^2 - b^2$, which is the product of binomials of the form $(a+b)(a-b)$.

Characteristics:

Difference of two squares
376 25-2

Examples:

Image Representation:

Non-Examples:

Definition:	Characteristics:
A binomial in the form of $(a+b)^2$ or $(a-b)^2$.	

Square of a binomial
25-2 377

Examples:	Image Representation:	Non-Examples:

Unit 4 vocab

Definition:	Characteristics:
Greatest monomial that divides into each term without a remainder	

Greatest common factor of a polynomial
385 26-1

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
Trinomials that are the result of squaring binomials.	

Perfect square trinomial
26-2 389

Examples:	Image Representation:	Non-Examples:

Definition:	Characteristics:
An expression that can be written as the ratio of two polynomials.	

Rational expression
28-1 403

Examples:	Image Representation:	Non-Examples:

Relation
p.66 [5.1]

Definition:

A Relation is a set of ordered pairs

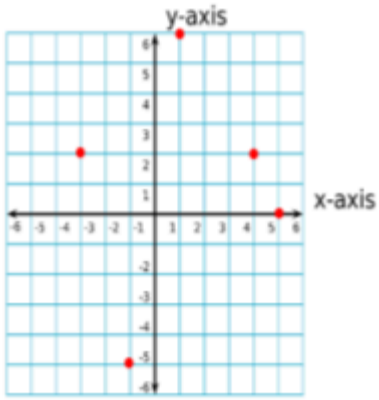
Characteristics:

You are able to check a set of ordered pairs to see it's function.

Examples:

{(1,4), (2,3), (6,5)}

Image Representation:



Non-Examples: