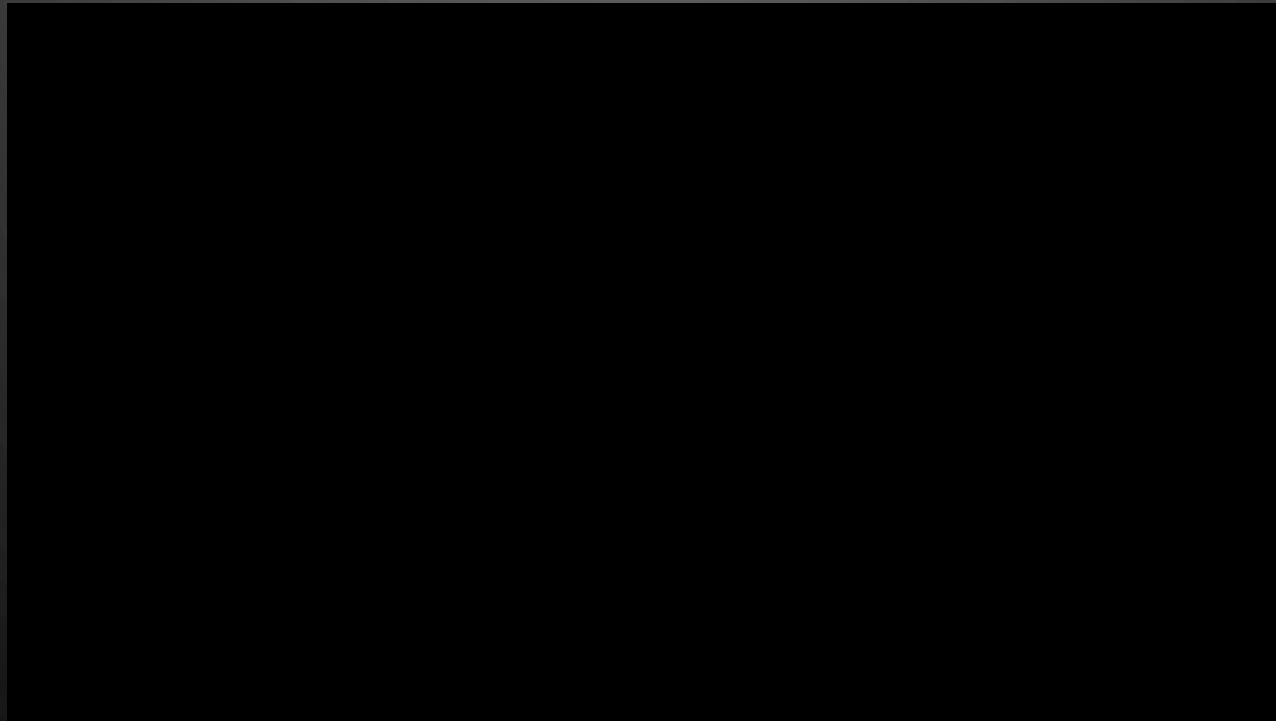




THE STORY SO FAR...

THE PYTHAGOREAN THEOREM



The background is a dark gray gradient. In the corners, there are several realistic-looking bubbles of various sizes, some overlapping, with highlights and shadows that give them a three-dimensional appearance.

USES OF THE PYTHAGOREAN THEOREM



USES OF THE PYTHAGOREAN THEOREM

- SOLVE RIGHT TRIANGLE APPLICATIONS
- 



USES OF THE PYTHAGOREAN THEOREM

- SOLVE RIGHT TRIANGLE APPLICATIONS
 - THE STANDARD EQUATION OF A CIRCLE
- 

USES OF THE PYTHAGOREAN THEOREM

- SOLVE RIGHT TRIANGLE APPLICATIONS
- THE STANDARD EQUATION OF A CIRCLE
 - DISTANCE FORMULA

USES OF THE PYTHAGOREAN THEOREM

- SOLVE RIGHT TRIANGLE APPLICATIONS
- THE STANDARD EQUATION OF A CIRCLE
 - DISTANCE FORMULA
- MAGNITUDE OF A VECTOR

USES OF THE PYTHAGOREAN THEOREM

- SOLVE RIGHT TRIANGLE APPLICATIONS
- THE STANDARD EQUATION OF A CIRCLE
 - DISTANCE FORMULA
 - MAGNITUDE OF A VECTOR
- ABSOLUTE VALUE OF A COMPLEX NUMBER

USES OF THE PYTHAGOREAN THEOREM

- SOLVE RIGHT TRIANGLE APPLICATIONS
- THE STANDARD EQUATION OF A CIRCLE
 - DISTANCE FORMULA
 - MAGNITUDE OF A VECTOR
- ABSOLUTE VALUE OF A COMPLEX NUMBER
 - POLAR COORDINATES

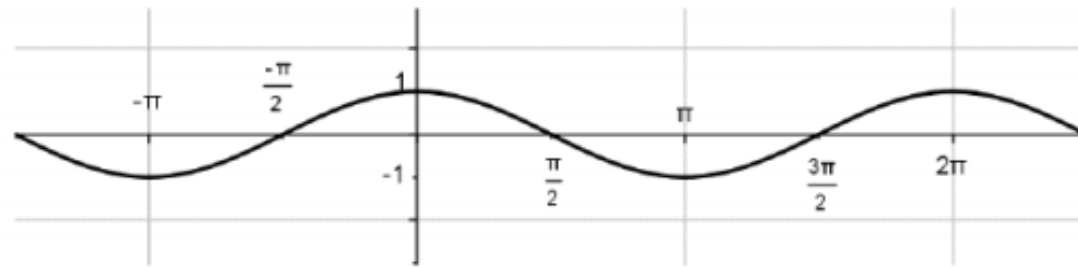
TRIGONOMETRIC FUNCTIONS

GRAPHS

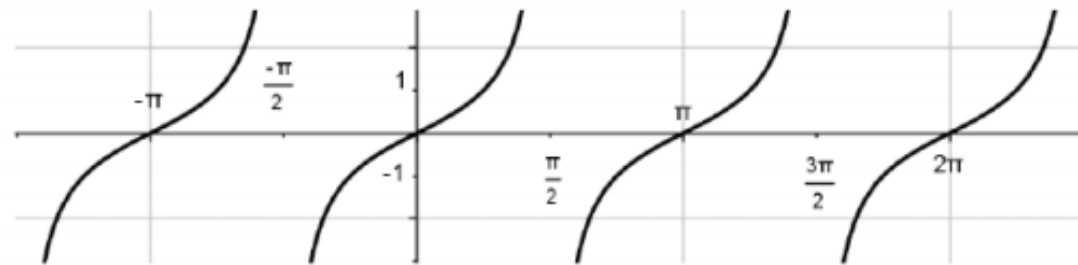
GRAPHS



Sine Function
 $f(x) = \sin(x)$

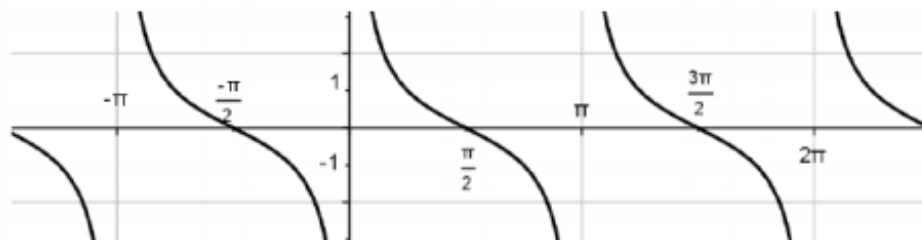


Cosine Function
 $f(x) = \cos(x)$

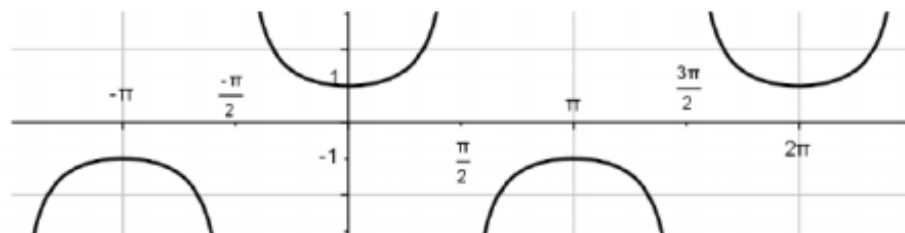


Tangent Function
 $f(x) = \tan(x)$

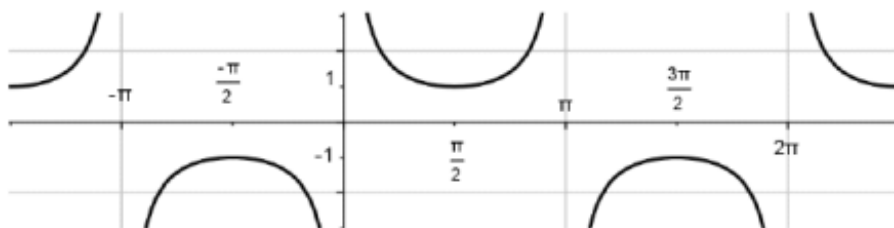
GRAPHS



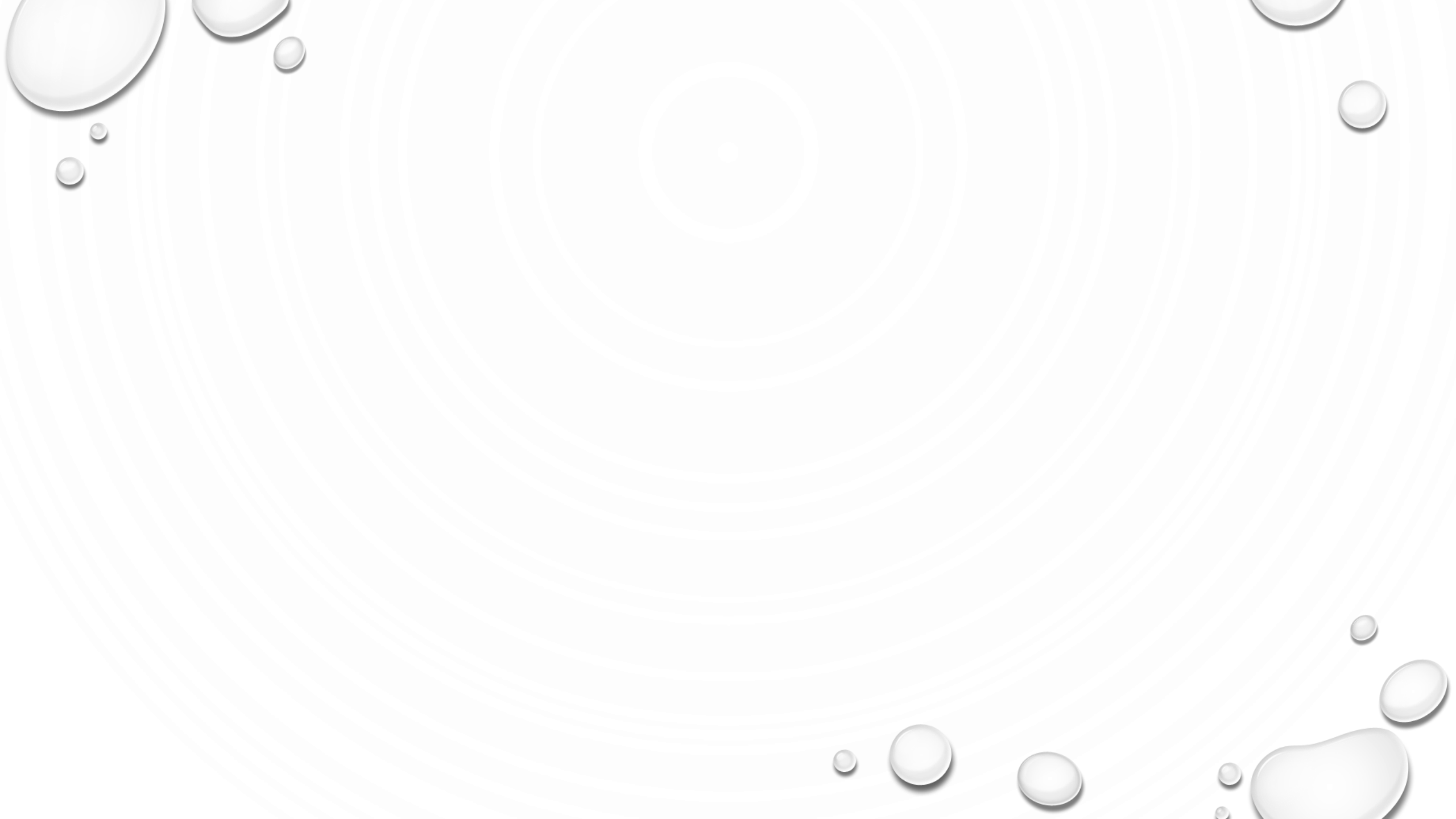
Cotangent Function
 $f(x) = \cot(x)$



Secant Function
 $f(x) = \sec(x)$



Cosecant Function
 $f(x) = \csc(x)$



SEQUENCES AND SERIES

The image features a dark gray background with the title 'SEQUENCES AND SERIES' centered in white, bold, sans-serif font. The corners of the image are decorated with several translucent, 3D-rendered bubbles of various sizes, some overlapping, creating a modern and clean aesthetic.

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT
 - RECURSIVE

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT
 - RECURSIVE
- SEQUENCE HALL OF FAME

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT
 - RECURSIVE
- SEQUENCE HALL OF FAME
 - ARITHMETIC

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT
 - RECURSIVE
 - SEQUENCE HALL OF FAME
 - ARITHMETIC
 - GEOMETRIC (HOW MANY PEOPLE DID IT TAKE TO MAKE YOU!!!)

SEQUENCES AND SERIES

- A SEQUENCE CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT
 - RECURSIVE
- SEQUENCE HALL OF FAME
 - ARITHMETIC
 - GEOMETRIC (HOW MANY PEOPLE DID IT TAKE TO MAKE YOU!!!)
 - SERIES

SEQUENCES AND SERIES

- A **SEQUENCE** CAN BE THOUGHT OF AS A FUNCTION WITH DOMAIN THE NATURAL NUMBERS.
 - EXPLICIT
 - RECURSIVE
 - SEQUENCE HALL OF FAME
 - ARITHMETIC
 - GEOMETRIC (HOW MANY PEOPLE DID IT TAKE TO MAKE YOU!!!!)
 - SERIES
 - BINOMIAL THEOREM

POLYNOMIALS

The background is a dark gray gradient. In the center, there is a faint, light gray circular pattern consisting of several concentric circles. Scattered around the edges are several realistic water droplets of various sizes, some with highlights and shadows, giving them a three-dimensional appearance.

POLYNOMIALS

- REMAINDER THEOREM

POLYNOMIALS

- REMAINDER THEOREM
- FACTOR THEOREM

POLYNOMIALS

- REMAINDER THEOREM
- FACTOR THEOREM
- RATIONAL ZERO THEOREM

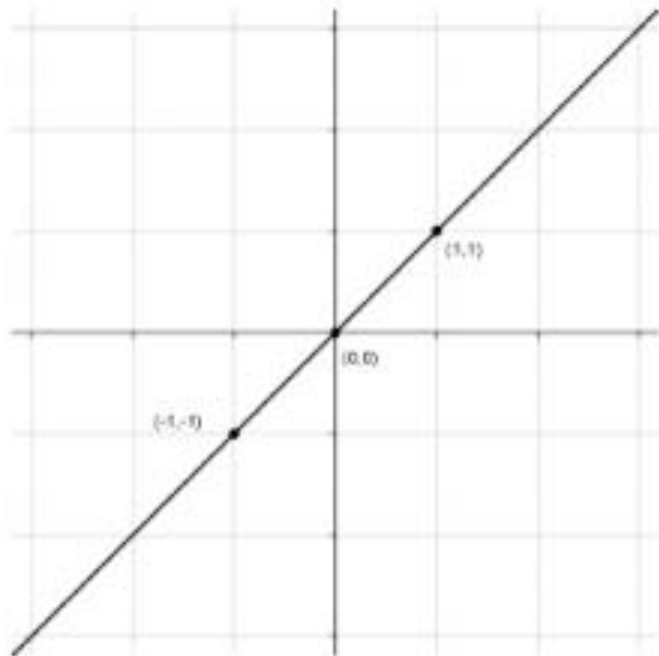
POLYNOMIALS

- REMAINDER THEOREM
- FACTOR THEOREM
- RATIONAL ZERO THEOREM
- FUNDAMENTAL THEOREM OF ALGEBRA

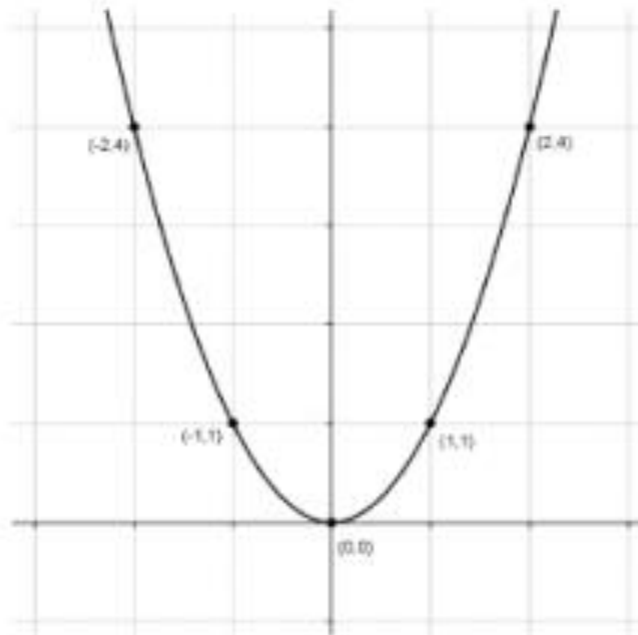
POLYNOMIALS

- REMAINDER THEOREM
- FACTOR THEOREM
- RATIONAL ZERO THEOREM
- FUNDAMENTAL THEOREM OF ALGEBRA
- CONJUGATE PAIRS THEOREM

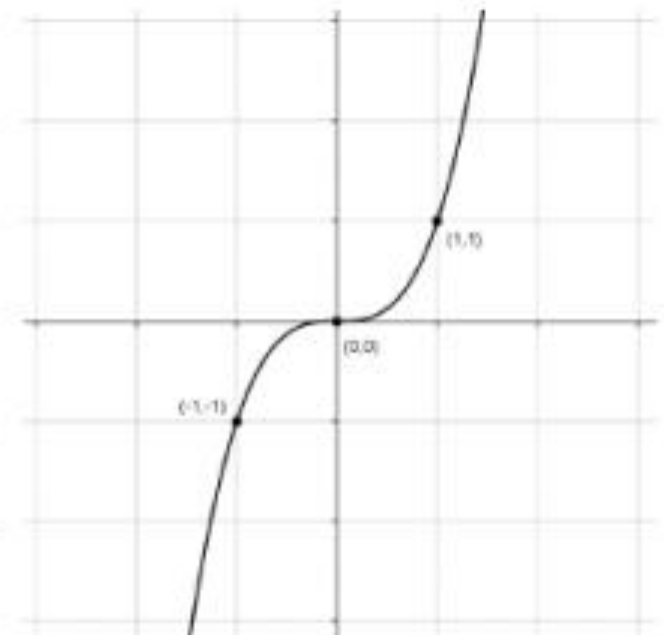
BASIC GRAPHS OF POLYNOMIALS



Identity Function: $f(x) = x$



Square Function: $f(x) = x^2$



Cube Function: $f(x) = x^3$

RATIONAL FUNCTIONS

The background is a dark gray gradient with several realistic water droplets of various sizes scattered around the edges. The droplets have highlights and shadows, giving them a three-dimensional appearance.

The background is a dark gray gradient. In the corners, there are several realistic-looking bubbles of various sizes, some overlapping, with highlights and shadows that give them a three-dimensional appearance.

RATIONAL FUNCTIONS

- VERTICAL ASYMPTOTES

The background is a dark gray gradient. In the top-left and bottom-right corners, there are several realistic-looking bubbles of various sizes, some overlapping. The bubbles have highlights and shadows, giving them a three-dimensional appearance.

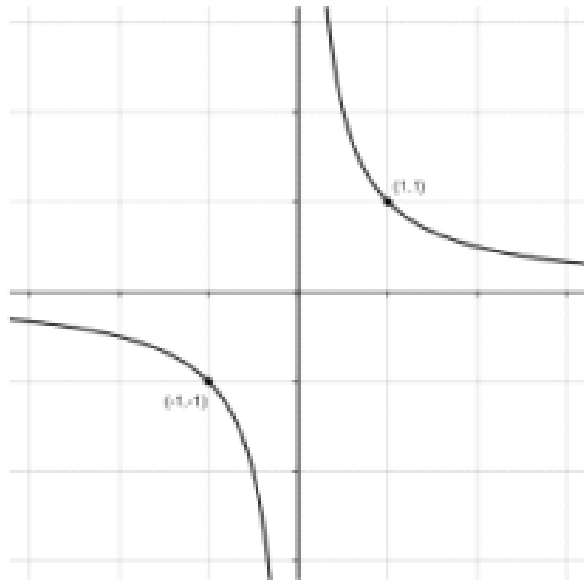
RATIONAL FUNCTIONS

- VERTICAL ASYMPTOTES
- HORIZONTAL ASYMPTOTES

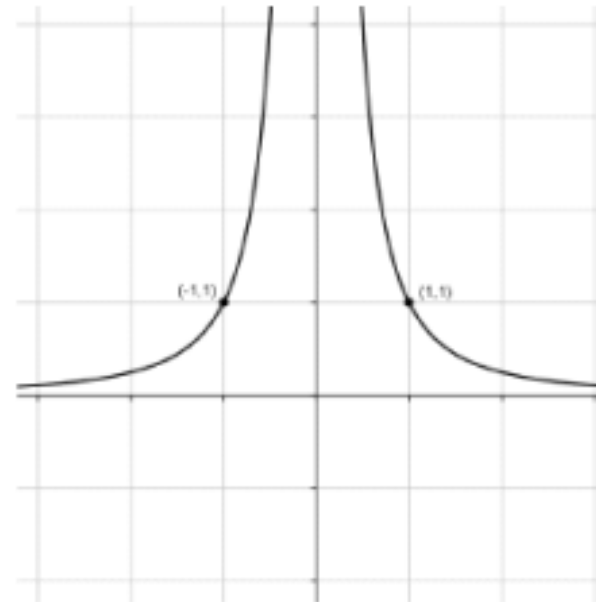
RATIONAL FUNCTIONS

- VERTICAL ASYMPTOTES
- HORIZONTAL ASYMPTOTES
- SLANT ASYMPTOTES

BASIC GRAPHS OF RATIONAL FUNCTIONS



Reciprocal Function : $f(x) = \frac{1}{x}$



$f(x) = \frac{1}{x^2}$

EXPONENTIAL AND LOGARITHMIC FUNCTIONS



EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- INVERSE AND COMPOSITE FUNCTIONS
- 



EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- INVERSE AND COMPOSITE FUNCTIONS
 - PROPERTIES OF LOGARITHMS
- 

EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- INVERSE AND COMPOSITE FUNCTIONS
- PROPERTIES OF LOGARITHMS
- SOLVING EQUATIONS

EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- INVERSE AND COMPOSITE FUNCTIONS
- PROPERTIES OF LOGARITHMS
- SOLVING EQUATIONS
- E

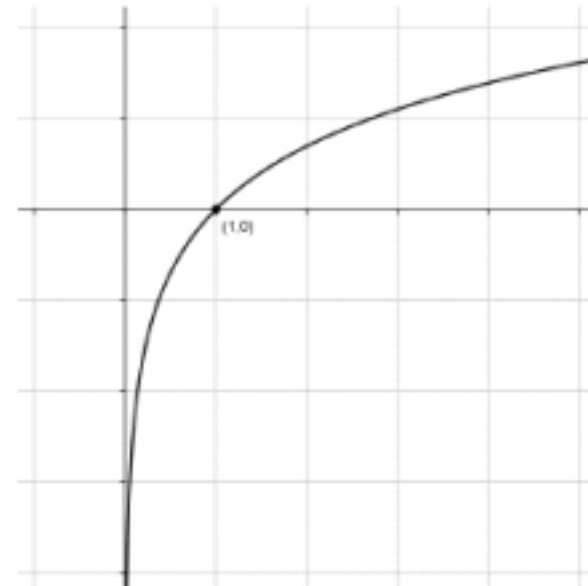
EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- INVERSE AND COMPOSITE FUNCTIONS
- PROPERTIES OF LOGARITHMS
- SOLVING EQUATIONS
- E
- APPS! (HOW TO BECOME A MILLIONAIRE!!)

BASIC GRAPHS

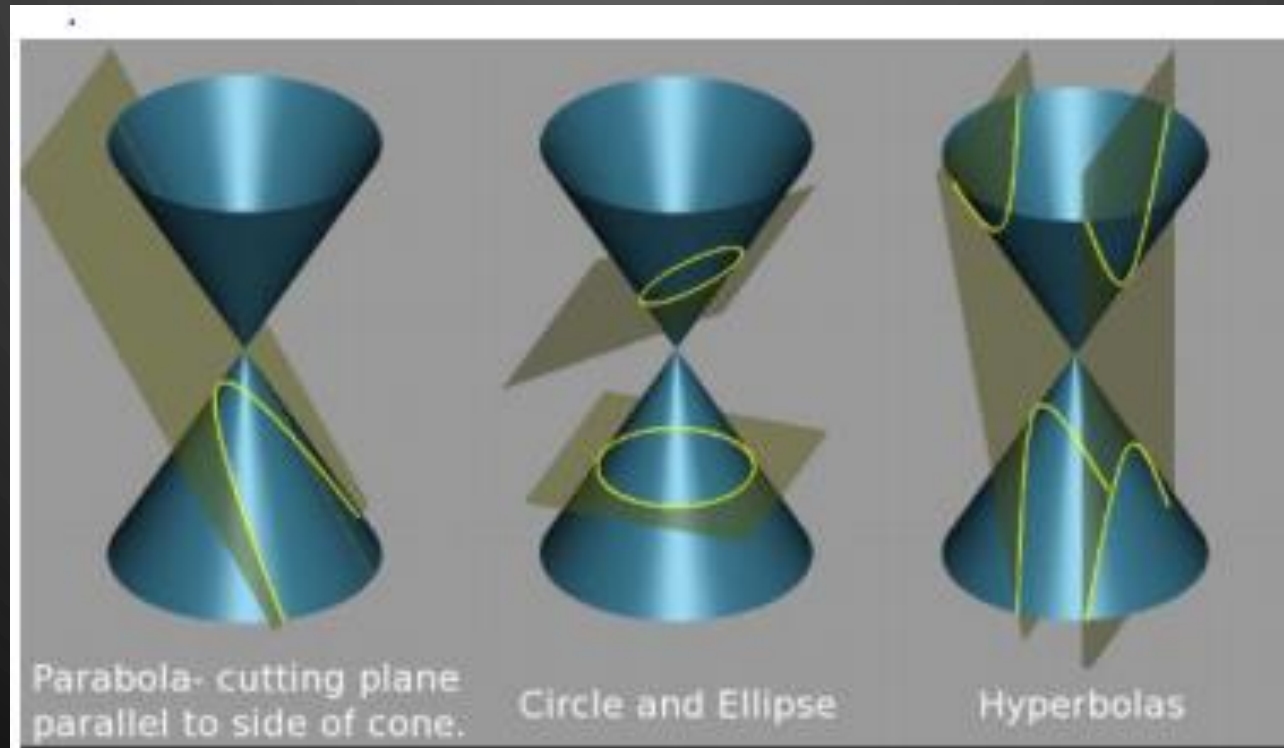


Exponential Function: $f(x) = e^x$



Natural Logarithm Function: $f(x) = \ln(x)$

CONIC SECTIONS



The background is a dark gray gradient. In the top-left and bottom-right corners, there are several realistic-looking bubbles of various sizes, some overlapping, with highlights and shadows that give them a three-dimensional appearance.

CONIC SECTIONS

- PARABOLA (APPS!)

The background is a dark gray gradient. In the corners, there are several realistic-looking bubbles of various sizes, some overlapping, with highlights and shadows that give them a 3D effect. The bubbles are most prominent in the top-left and bottom-right corners.

CONIC SECTIONS

- PARABOLA (APPS!)
- ELLIPSE

The background is a dark gray gradient with several realistic, reflective bubbles of various sizes scattered in the corners. The bubbles have highlights and shadows, giving them a 3D effect.

CONIC SECTIONS

- PARABOLA (APPS!)
- ELLIPSE
- HYPERBOLA

The background is dark gray with several translucent, 3D-rendered bubbles of various sizes scattered in the corners. The bubbles have highlights and shadows, giving them a realistic appearance.

CONIC SECTIONS

- PARABOLA (APPS!)
- ELLIPSE
- HYPERBOLA
- POLAR COORDINATES

SYSTEMS OF EQUATIONS AND MATRICES

The image features a dark gray background with the title 'SYSTEMS OF EQUATIONS AND MATRICES' centered in a bold, white, sans-serif font. The corners of the image are decorated with several realistic, 3D-rendered bubbles of varying sizes, some appearing to float or cluster together.

SYSTEMS OF EQUATIONS AND MATRICES

- SYSTEMS OF TWO EQUATIONS (AND INEQUALITIES), TWO UNKNOWNNS (LINEAR AND NONLINEAR!)

SYSTEMS OF EQUATIONS AND MATRICES

- SYSTEMS OF TWO EQUATIONS (AND INEQUALITIES), TWO UNKNOWNNS (LINEAR AND NONLINEAR!)
- PARTIAL FRACTIONS

SYSTEMS OF EQUATIONS AND MATRICES

- SYSTEMS OF TWO EQUATIONS (AND INEQUALITIES), TWO UNKNOWNNS (LINEAR AND NONLINEAR!)
- PARTIAL FRACTIONS
- GAUSSIAN ELIMINATION

SYSTEMS OF EQUATIONS AND MATRICES

- SYSTEMS OF TWO EQUATIONS (AND INEQUALITIES), TWO UNKNOWNNS (LINEAR AND NONLINEAR!)
- PARTIAL FRACTIONS
- GAUSSIAN ELIMINATION
- MATRICES (HUGE FOR MANIPULATING DATA)