

# A TALE OF MATHEMATICAL MERRIMENT

## Individual Christmas/Kwanza/Chanukah Project

(Precalculus)

Due date: Friday, December 13, 2019

Point value: TWO QUIZ / DAILY GRADES

ALSO: Due, Tuesday, December 10, 2019—**A Mathy Xmas Ornament** (worth up to 5 points on a test!)

Directions:

Write (then type up) an original composition with a Christmas/Kwanza/Chanukah theme containing at least 25 of the following mathematical terms (or variations of them) integrated within a holiday/humorous/mathematical tale. The first occurrence of each of these words should be underlined. You may use other words that we have encountered in class so far this year too. **The length of the composition must not exceed one double-spaced typewritten page (10-12 point font)**. Be sure to give your story a title. Put your name and period in the top right corner on the BACK of your paper (THIS may be handwritten). Center your title on the front page. You will turn in a hard copy

Have a jolly, fun, mathematical time!! We will read the most creative/HO HO HOwesome ones in class.

Absolute Maximum	Difference Quotient	Infinity	Real Part
Absolute Minimum	Dilation	Inflection Point	Reflection
Absolute Value	Discontinuity	Intercept	Relative Maximum
Acceleration	Distance	Interval	Relative Minimum
Acute	Domain	Interval Notation	Removable Point
Algebra	Ellipse	Inverse Function	Discontinuity
Analytic Methods	End Behavior	Jump Discontinuity	Restricted Domain
Angle	Even Function	Limit	Secant Line
Asymptote	Expansion	Local Behavior	Set-Builder Notation
Average Rate of Change	Exponent	Local Maximum	Sine
Binomial	Exponential	Local Minimum	Slope
Bounded Function	Growth/Decay	Matrix	Stretch
Cartesian Plane	Extreme Value	Midpoint	Symmetric
Center of Rotation	Factor	Numerator	Symmetry
Closed Interval	Formula	Obtuse	Tangent Line
Complex Number	Geometry	Odd Function	Theorem
Composite	Global Maximum	One-to-One Function	Transformation
Composition	Global Minimum	Open Interval	Transformations
Compress	Half-Closed Interval	Parabola	Vector
Compression	Half-Open Interval	Parallel	Velocity
Cone	Hole	Parent Functions	Vertical Compression
Conic	Horizontal Compression	Pi	Vertical Dilation
Conjugate	Horizontal Dilation	Perpendicular	Vertical Line Test
Constant	Horizontal Line Test	Piecewise Function	Vertical Reflection
Continuity	Horizontal Reflection	Power	Vertical Shift
Continuous Function	Horizontal Shift	Radical	Vertical Stretch
Cosine	Horizontal Stretch	Radius	Vertical Translation
Cosecant	Horizontal Translation	Radian	Volume
Cotangent	Hyperbola	Range	
Curve	Imaginary Part	Rate of Change	
Decreasing Function	Increasing Function	Ratio	
Degree	Inequality	Rational	
Denominator	Infinite	Ray	

## Grading Rubric

Points earned	Directions
4	Name and class period top right on BACK of paper
8	Length does not exceed one page
4	Title Centered
8	Double Spaced
8	10-12 point font
8	Printed and turned in on time.
10	Quality of Story
50	25 different <u>underlined</u> mathematical terms (2points each) in a story.