



Graphic by Kyle Halgerson '06

MATHEMATICAL IDOL

Reunion Tour: The infamous duo returns!

2015 SDCTM/SDSTA Conference
(names withheld to protect them)

G-Trog
Watertown High School

K-Dog
Montrose High School

(Did you ever notice that idol is just two letters away from idiot?)

Slope Song

(Turkey in the Straw)

Slope is rise over run as we all know.
With the Y's on the top and the X's below.
Subtract the terms to get it right.
Simplify last for a wonderful sight.

(Chorus)

Rise over run, Y's over X.
Rise over run, Y's over X.
Subtract the terms to get it right.
Simplify last for a wonderful sight!

Y = MX + B

(YMCA)

Students, we need to graph a straight line.
I said, students, we will have a great time.
I said, students there's no reason to whine.
There's no need to be unhappy...

It's fun to graph $y = mx + b$
It's fun to graph $y = mx + b$
It makes a straight line and it'll be fine
You can even find the slo-ope!

(repeat)

Quadratic Equation Song

(Pop Goes the Weasel)

$$X = \frac{-B \pm \sqrt{B^2 - 4AC}}{2A}$$

X equals negative B plus or minus the square root
Of B squared minus four AC,
All over two A!

Discriminant Rap

(Get a good rap beat going)

Have students imagine a number line on the floor in front of them.

B squared minus four AC!

How many answers will there be?

Positive 2 (Jump to the right)

Negative none (Jump to the left)

Zero only one! (Jump to the center)

(Note that "none" refers to no real answers, but there could be complex numbers.)

Critical Numbers Cadence

(Marching cadence ala the Marines)

I don't know but I've been told,

(repeat)

My math teacher is not old!

(repeat)

Numbers critical we find

(repeat)

At zero or undefined.

(repeat)

Sound off!

Up, down, max, min, meaning give

To the first derivative!

We Will Graph You!

(We Will Rock You)

Buddy you're tryin' to draw the line

For the m and the b that we're assigned:

Ain't hard you see, put your pencil on the b,

One more point will guarantee that...

We will, we will graph you!

We will, we will graph you!

So now you know the y-intercept;

Here's how we find the rest of it:

Up with rise, across for run,

Plot another point and when they're done sing...

We have, we have graphed you!

We have, we have graphed you!

X to the Zero Power

(Day-O Banana Boat Song)

(Chorus)

Zero! I say ze-e-e-ro.

X to the zero power is one.

(Repeat)

Hey Mr. Tally man tally me exponents.

X to the zero power is one.

(Repeat)

(Chorus)

Zero! I say ze-e-e-ro.

X to the zero power is one.

(Repeat)

One power two power three power four.

X to the zero power is one.

Add those exponents let's do some more.

X to the zero power is one.

(Chorus)

Zero! I say ze-e-e-ro.

X to the zero power is one.

(Repeat)

Circle Song

(Are You Sleeping?)

A equals Pi R² Area, Area

C equals Pi times diameter, Circumference, Circumference!

SOHCAHTOA!

(Handel's Hallelujah Chorus)

Soh Cah Toa!
Soh Cah Toa!
Learn it, and use it!
Soh Cah Toa!

Sine is opposite over hypotenuse.
Soh Cah Toa
Soh Cah Toa
Learn it, and use it!

Cosine is adjacent over hypotenuse.
Soh Cah Toa
Soh Cah Toa
Learn it, and use it!

Tangent is opposite over adjacent!
Soh Cah Toa
Soh Cah Toa
Learn it, and use it!

SOH CAH TOA!

Product Rule for Derivatives

(Twinkle Twinkle Little Star)

One D-two plus 2-D one.
That's the way we get it done

Quotient Rule for Derivatives

(Angels We Have Heard on High—Gloria)

Low D-high minus high D-low
Draw the line and down below
Denominator squared will go!

Matrix Multiplication

(My Darling Clementine)

Row by column, row by column,
Multiply them line by line.
Add them up to form a matrix,
Now you're doing it just fine!

The Distance Formula

(On Top of Old Smokey)

When finding the distance
Between two points,
Subtract the two x's
Do the same for the y's.
Now square both these numbers,
And find out their sum.
When you take the square root
Then you are all done!

Adding Integers

(Row, Row, Row Your Boat)

Same signs add and keep
Different signs subtract
Use the sign of the bigger number
Then you'll be exact

Multiplying and Dividing Integers

(Are You Sleeping Brother John?)

Multiplying and dividing
Use same sign
Use same sign
You will get a positive
You will get a positive
You'll be fine
You'll be fine

FOIL!

(Bingo: Clap on subsequent verses)

To multiply binomials use the FOIL method!

First Outside Inside Last!

First Outside Inside Last!

First Outside Inside Last!

Use the FOIL method!

Cubic Factoring

(The wedding song) Jenelle Benike Wall HS

A same-sign B.

A-squared, opposite sign AB

Always a plus then B-squared at the end.

(repeat)

Slope Cheer

(Football cheer)

We say parallel you say same slope.

Parallel! *Same slope!*

Parallel! *Same slope!*

We say same slope you say parallel.

Same slope! *Parallel!*

Same slope! *Parallel!*

We say perpendic you say opp/recip

Perpendic! *Opp/recip!*

Perpendic! *Opp/recip*

We say opp/recip you say perpendic.

Opp/recip! *Perpendic!*

Opp/recip! *Perpendic!*

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South Dakota Council of Teachers of Mathematics official website
<http://www.sdctm.org/>

Bill's class singing their original math song
<https://www.youtube.com/watch?v=r2zLxEtE2NA>

Quadratic formula song by Mike Kelley
https://www.youtube.com/watch?v=D_0vgqi7fU4&feature=related