



Math Tunes



*The Singing Math Teachers
from Pasco County*

Math Tunes

***The Singing Math Teachers from
Pasco County***

Presented by:

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and Katie Mooney***

Pasco County

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What To do?

1. Pick a well know tune or holiday song.

***2. Choose a concept to be remembered.
(Rules or Steps)***

***3. Keep it simple!
Keep it short!***

4. Write your song on a transparency to share.

Math Tunes

1. *Mathematunes! (Isosceles) - Track 1*
2. *Ingrid the Isosceles Triangle - Track 2*
3. *Radical Song - Track 3*
4. *Adding Fractions - Track 4*
5. *Metric System - Track 5*
6. *Commutative and Associative Properties - Track 6*
7. *Math is so Great! - Track 7*
8. *Order of Operations - Track 8*
9. *Number Systems - Track 9*
10. *CPCFC - Track 10*
11. *CPCFC - Track 10*
12. *Statistics - Track 11*
13. *The Equation Solving Game - Track 12*
14. *Factoring*
15. *Trouble With Geometry - Track 13*
16. *Special Right Triangles - Track 14*
17. *Graph a Line - Track 15*
18. *The Integer Song - Track 16*
19. *Find the Area - Track 17*
20. *I Wouldn't Have to Factor - Track 18*
21. *Perimeter Dandy - Track 19*
22. *Working With Signed Numbers - Track 20*
23. *Identity - Track 21*
24. *I Ain't Nothing But a Polygon - Track 22*
25. *Slope Intercept - Track 23*
26. *Word Problems*
27. *Twinkle Twinkle Variables*
28. *Positive and Negative Slope - Track 24*
29. *Power Rule - Track 25*
30. *One Little, Two Little, Three Little Angles - Track 26*
31. *Multiplying Simple Fractions - Track 27*
32. *Math Busters - Track 28*
33. *Multiplication - Track 29*
34. *Fibonacci - Track 30*
35. *Quadratic Formula - Track 31*
36. *Subtraction - Track 32*
37. *I'm a Little Polygon - Track 33*
38. *FCAT (YMCA) - Track 34*
39. *Perimeter, Area, Volume Song - Track 35*
40. *Slope Dance - Track 36*
41. *Slope Intercept Form - Track 37*
42. *Problem Solving Strategies - Track 38*
43. *Like Terms - Track 39*
44. *Adding Fractions II - Track 40*
45. *Many Triangles - Track 41*
46. *Exponent Rules - Track 42*
47. *PEMDAS - Track 43*
48. *The Imaginary Numbers Song - Track 44*
49. *Multiplying Integers - Track 45*
50. *Rounding Whole Numbers - Track 46*
51. *If & Then - Track 47*
52. *The Product Rule In Calculus - Track 48*
53. *Tessellations - Track 49*
54. *Rates & Ratios - Track 50*
55. *Proportion Song - Track 51*
56. *FCAT - Track 52*
57. *FCAT Test is in Florida Now - Track 53*
58. *When We Add - Track 54*
59. *Find the Number of Diagonals in a Polygon - Track 55*
60. *Metrics - Track 56*
61. *Factoring - Track 57*
62. *Pythagorean Theorem Song - Track 58*
63. *Multiplying & Dividing Fractions (Rationals) - Track 59*
64. *The Powers of i - Track 60*
65. *Sine Song - Track 61*
66. *Inequalities - Track 62*
67. *Congruent Triangles - Track 63*
68. *Rock Around the Decimal Point - Track 64*
69. *Angles - Track 65*
70. *Slope Song - Track 66*
71. *Standard Form - Track 67*
72. *We're Negatively Positive - Track 68*
73. *Combining Like Terms - Track 69*
74. *The Line That Never Ends - Track 70*
75. *To Isolate the Variable - Track 71*
76. *Mode on the Range - Track 72*
77. *Adding on the Number Line - Track 73*
78. *Jeometry Jingle - Track 74*
79. *Adding Integers - Track 75*

1.

MATHEMATUNES!

*May be sung to the tune of the Oscar Mayer Bologna song
by Pat Reisdorf*

*If you have three sides the same in length, it's EQUILATERAL,
If you have not any sides the same, it's always called SCALENE,
But the one that ends up hard to spell,
Two sides the same, you know it well---
It's I-S-O-S-C-E-L-E-S, and it's ISOSCELES.*

2.

INGRID THE ISOSCELES TRIANGLE

*May be sung to to the tune of Rudolph the Red Nosed Reindeer
by students in Jill Nielsen's class 1990 (edited by D. Nelson 1992)*

*Ingrid , the Isosceles triangle,
Had at least 2 congruent sides.
And if she had none congruent
Then she'd be called scalene.*

*All of the equilaterals
Used to laugh and call "Obtuse!"
They never let poor Ingrid
Join in any polygon proofs.*

*Then one difficult geometry eve
Equiangular came to say
"Ingrid with your two sides the same."
Won't you play my median game?"*

*Then all the equilaterals liked her,
And they shouted out "Isosceles!"
Ingrid the Isosceles triangle
You'll go down in Geometry!*

3.

RADICAL SONG

*May be sung to the tune of Take Me Out to the Ball Game
by Jill Nielsen*

*Now, let's simplify radicals
It's so easy to do.
Find perfect square factors from inside the sign
Take their square roots and put them outside.*

*Yes, it's root, root, root, take the square root.
Check it again one more time.
Did you find all the perfect squares
On the very first try?*

4.

Adding Fractions

*May be sung to the tune of The Flintstones
By: Nielsen, Kotter & Mooney*

*Fractions, adding fractions.
Find a common denominator.
Change the numerator.
Multiply it by the same number.
Add the numerators together.
Keep the same old denominator.
Simplify your answer.
Cancel any common factors.
Don't be a slacker,
and now you've done it right.*

5.

Metric System

May be sung to the tune of: "Henry the 8th"

By Nielsen, Kotter & Mooney

*I'm King Henry the 8th I am,
King Henry the 8th I am, I am.
I learned metrics from the widow next door.
We used a meter stick to measure the floor.
She said my crown weighed a Kilogram.
Offered me a Liter of chocolate milk.
I died Monday drinking chocolate milk.
King Henry the 8th I am, I am,
King Henry the 8th I am.*

6.

Commutative & Associative Properties

May be sung to the tune of: "I've been working on the railroad"

By: Mooney

*I've been working on Algebra,
All the live long day.
I've been studying properties,
Just to pass the time away.
Can't you hear the teacher yelling,
"Commutative numbers move".
Can't you hear the teacher yelling,
"Associative changes groups".*

7.

MATH IS SO GREAT!!

*May be sung to the tune of "I'm Gettin' nutin' for Christmas"
by Tasha Lero, a student*

*Math is so great to learn,
Planes that go every which way.
Laws that have never been heard of,
And I get to learn them all day.*

*Like postulates and polygons,
Always make sense to me.
Like triangles and hexagons
Teacher, can you see...That*

*Math is so great to learn,
Planes that go every which way.
Laws that have never been heard of,
And WE get to learn them all day.*

8.

ORDER OF OPERATIONS

*May be sung to the tune of Amen
by Nielsen, Kotter & Mooney*

*Oh my head,
How it aches,
Multiple operations my heart breaks.*

*Parenthesis,
They come first,
Exponents take second place.
(Think about it)*

*Start at the left,
Go to the right
Multiply and divide as they come into sight.
(Oh I feel it)*

*Add and subtract
From the left to right
Now I've got the power to do it right.*

*Oh my head
Now it's clear
Order of operations will not be feared.*

9.

Number Systems

May be sung to the tune of; "The Bear went over the Mountain"

By: Nielsen, Kotter & Mooney

(1)

*The naturals came over the mountain.
The naturals came over the mountain.
The naturals came over the mountain.
To count what they could see.
Like one and two and three.
The naturals came to be.
The naturals came over the mountain,
To count what they could see.*

(2)

*Zero rolled down the mountain.
Zero rolled down the mountain.
Zero rolled down the mountain,
And whole they came to be.
And whole they came to be.
Like zero and one, two, three.
Zero rolled down the mountain,
And whole they came to be.*

(3)

*The negatives crossed the ocean.
The negatives crossed the ocean.
The negatives crossed the ocean,
To join the family.
Like negative one, two, three
They're opposites can't you see.
The negatives crossed over the ocean
And integers came to be.*

(4)

*The Integers started dividing.
The Integers started dividing.
The Integers started dividing,
To halves and thirds and fourths.
They're rationals of course.
The families grown full force.
The Integers started dividing
and rationals joined the force.*

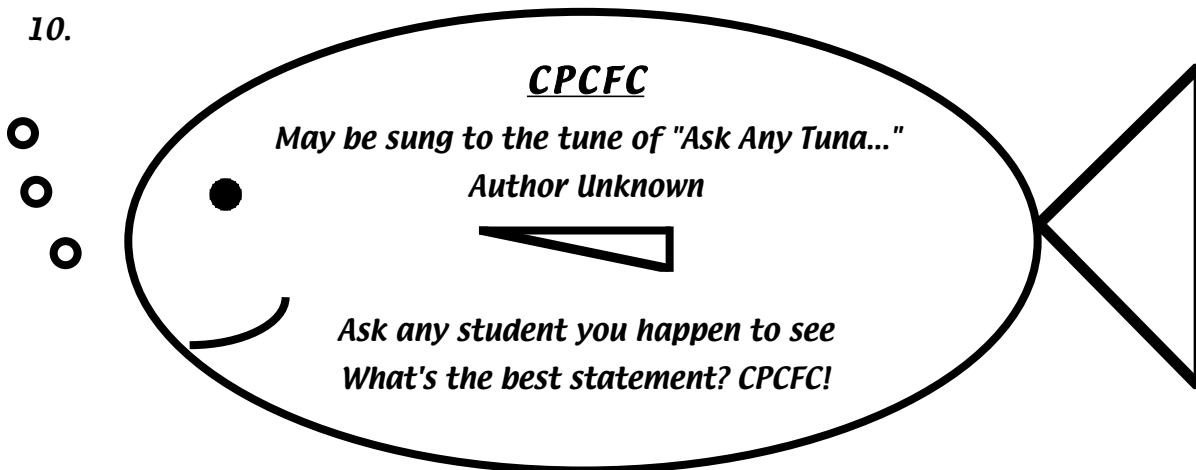
(5)

*Rationals were getting hungry.
Rationals were getting hungry.
Rationals were getting hungry,
And π fell from the sky.
An infinite decimal supply.
Irrationals they can fly.
Irrationals will never repeat.
And they will never die.*

(6)

*Naturals and Wholes and Integers,
Rationals and Irrational Numbers,
Together they make the real family,
And live on the number line.
And live on the number line.
A continuous happy time.
Together they make a real family,
And live on a number line.*

10.



11.

CPCFC

by Jill Nielsen

*Oh, CPCFC,
Yes, that's the rule for me.
It stands alone from the definition
Of congruent figures you see.*

12.

STATISTICS

*May be sung to the tune of Kukabera
by Nielsen, Kotter & Mooney*

*Statistics are a fun and interesting thing.
A synonym for mean is average.
Add all the data then divide by how many there are.*

*Finding the median is easy you see.
Order all the data 1-2-3.
Sometimes you'll find two in the middle take their mean is what you do.*

*Mode is a most important fellow.
You can have one or more or zero.
Last is the range, high minus low, and your job is done.*

13.

THE EQUATION SOLVING GAME

*May be sung to the tune of She'll Be Coming Round the Mountain
by Nielsen, Kotter & Mooney*

*We'll be solving addition equations all day long.
We'll be solving addition equations all day long.
We'll be adding to the right side, we'll be adding to the left side.
The opposite will be added to both sides.*

*If you have a coefficient with the "a" .
Division is the only way to play.
The coefficient and divider will have the same ol' sign and the
Solution will equal positive a.*

*Solving inequalities is much the same,
As playing the equation solving game.
'Cept if the multiplier or divider is a negative change that
Pointer to the opposite direction from which it came.*

14.

FACTORING

*May be sung to the tune of Mc Donald's "You deserve a break today..."
by Jill Nielsen*

*Factoring polynomials,
It's so easy to do.
When you know the four ways,
You can do it all day.
GCF, and Perfect Square,
Difference of Squares, and I Method
In Mc Algebra , YOU do it all for you.*

15.

Trouble with Geometry

(A Rap By A Student--Min Chow)

***This is the story of Geometry,
Its easy for some people,
But hard for me.***

Gee ge gee ge ge-ometry!

***Working with angles triangles and such,
polygons, congruents,
Its all too much.***

Gee ge gee ge ge-ometry!

***Acute triangles, convex polygons.
Things move so fast,
You better turn on.***

Gee ge gee ge ge-ometry!

***Its rules teach me,
so I try real hard.
If I stick with this,
Then I can get real far.***

Gee ge gee ge ge-ometry!

16.

Special Right Triangles

*May be sung to the tune of "Yankee Doodle Dandy"
by Jill Nielsen*

*I'm a 45, 45, 90.
A special right triangle.
My hypotenuse is worth the square root of 2
Times either of my legs.*

*I've got 2 special relationships
Connecting all three sides.
If you've got just one of my sides,
You can find the others.
I am a 45, 45, 90.*

*I'm a 30, 60, 90.
A special right triangle.
My hypotenuse is worth 2 times
My shorter leg.*

*My longer leg is worth the square root of three
times my shorter leg too.
If you've got just one of my sides,
You can find the others.
I am a 30, 60, 90.*

17.

Graph a Line

*May be sung to the tune of "The Pink Panther"
By: Nielsen, Kotter, and Mooney*

*Got an x and y
They're in the same equation
It's a line....*

*Make a chart
Pick x, plug in the number
Solve for y.
Do...it over and then you'll have two ordered pairs.
Cause it takes two
To Graph a line.*

*Graph X, it's first
To the left or right based on it's sign.
Then, plot y
Up or down again based on it's sign.
Now...plot the others points and draw you line.
What a fine, little line.*

18.

The Integers Song

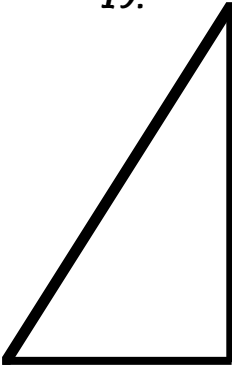
*May be sung to the tune of "Row, Row, Row, Your Boat"
By The Workshop Participants in the late 1990's*

*Slide, Slide, Slide your square to the left or right
the sign will tell you what to do
the answer is in sight*

+
-
+
-

+
-
+
-

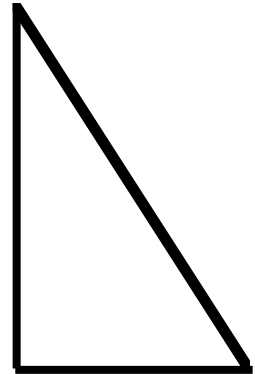
19.



Find The Area

*May be sung to the tune of "Clementine"
By The Workshop Participants in the Late 1990's*

*To find the area of a triangle
Take half the base times height.
Put your label in square units
So you teacher marks it right.
Don't confuse this perimeter
That's the sum of all these sides,
And label isn't square though
'Cause we added, not multiplied.*



20.

I wouldn't Have to Factor

*May be sung to the tune of "If I Were a Rich Man" from "Fiddler on the Roof"
By The Workshop Participants in the Late 1990's*

*I wouldn't have to factor
If I could just remember all the letters of quadratic rules.
Start out with a negative b
Followed by a plus or minus.
Then you draw the radical
Fill it with a b squared minus 4ac.
End by dividing it all by 2a.
It's as easy as can be.*

21.

Perry Meter Dandy

*May be sung to the tune of "Yankee Doodle Dandy"
By The Workshop Participants in the Late 1990's*

*Perimeter is fun to do
It's distance all around.
There's formulas to help you out
Just listen to our sound.
Two lengths and widths for rectangles.
Add sides for polygons.
Two πr is for circles.
Now try it on your own.*

*Perimeter it can be fun
It's easy if you try.
Use it on all figures now
And get a real math high.*

22.

Working with Signed Numbers

*May be sung to the tune of "London Bridge"
By Alice White, Stacy Salute*

*When you're adding integers, integer, integers,
When you're adding integers, follow the sign.*

*When the signs are different, different, different,
When the signs are different you subtract.*

*Then the answer takes the sign, takes the sign, takes the sign,
Then the answer takes the sign of the larger number.*

*If you see the sign's the same, sign's the same, sign's the same,
If you see the sign's the same then you add them.*

*Now the answer's sign's the same, sign's the same, sign's the same,
Now the answer's sign's the same as the problem.*

23.

Identity

*May be sung to the tune of "Mickey Mouse"
By Nancy Shiffman and Lynda Reynen*

*I-D-E-N / T-I-T-Y, that's identity.
Adding zero, doesn't change
The value of the number
That you have.*

*It's the same, doesn't change.
it's easy as can be.
I-D-E-N / T-I-T-Y,
Additive identity!*

24.

I Ain't Nothing But A Polygon

May be sung to the Tune of "I Ain't Nothin' But A Hound Dog"

By: Mooney, Nielsen, Diane King and Nicki Weekes

*I AIN'T NOTHING BUT A POLYGON,
WITH LOTS OF SIDES.
I AIN'T NOTHING BUT A POLYGON,
WITH LOTS OF SIDES.
I AIN'T NEVER CAUGHT A CIRCLE,
NO MATTER HOW MANY SIDES I HAVE.*

*WHEN MY ANGLES ARE EQUAL,
AND SO ARE MY SIDES.
WHEN MY ANGLES ARE EQUAL,
AND SO ARE MY SIDES.
YOU'RE GONNA CALL ME REGULAR
Or YOU AIN'T NO FRIEND OF MINE.*

25.

Slope - Intercept

May be sung to the tune of "Barney" or "This old Man"

By 1994 FCTM Convention Attendees

*We have m
We have b
We have slope - intercept family,*

*Put these together and you will see
 $y=mx+b$.*

26.

Word Problems

May be sung to the tune of "Gilligan's Island"

By Kathy Ewing, Karen Hoff, Michelle Cox, Deborah Love, Anita White

*I'm a bad word problem
Please read me carefully.
Pick a variable, any variable
For my unknown (for my unknown)*

*Write an equation and solve for me
Answer the question please.
Go back and check to see if you have
done it correctly. (done it correctly)*

27.

Twinkle Twinkle Variables

May be sung to the tune of "Twinkle Twinkle Little Star"

By Valerie Freeman, Donna Short, Kathleen Phelan, Guy Courage

*Algebra variable, unknown stars,
How I wonder what you are.
In my problem $X + Y$
Unknown letters make me cry.
Give me a value for my X
Then I can solve this Algebra mess.
Algebra variables, unknown stars,
How I wonder what you are.*

28.

Positive and Negative Slope

May be sung to the tune of "Jack and Jill"

By Betty Humphrey, Jan Evans, and Rich Dewact

*X and Y went up the hill
With a positive slope.
The slope turned 'round
And Y fell down.
And X came tumbling after.*

29.

Power Rule

May be sung to the tune of "When You're Happy"

By Pam Coulliette, Caroline King, Elena Rosas-Guyon

*When you multiply like bases,
add exponents.*

*When you divide like bases,
Subtract exponents.*

*With a power to a power,
With a power to a power,
With a power to a power,
Multiply exponents.*

*When you have a negative exponent
Changes it's place; Reciprocate!*

*When you have zero exponent
you get one.*

*When you learn these rules,
When you learn these rules,
When you learn these rules,
then you can pass.*

30.

One Little, Two Little, Three Little Angles

*May be sung to the tune of "The Three Little Indians"
By Pam Coulliette, Caroline King, Elena Rosas - Guyon*

*When you have a central angle (3 times)
Here's what you should do!
The vertex is at the center (3 times)
And the angle equals its arc.*

*When you have an inscribed angle (3 times)
Here's what you should do!
The vertex is on the circle (3 times)
And the angle is half the arc.*

*When you have an outside angle (3 times)
Here's what you should do!
The angle is outside the circle (3 times)
And the angle is half the difference.*

*When you have an inside angle (3 times)
Here's what you should do!
The vertex is inside the circle (3 times)
And the angle is the average of the arcs.*

31.

Multiplying Simple Fractions

*May be sung to the tune of "Doe a Deer"
By Joy Rector, Delphine Lassitur, Rick Saskill*

*The top of the fraction is the numerator (call it N)
The bottom is our denominator (call it D)
Now get set to multiply,
Two... Fractions at a time.*

*N times N will chill on top.
D times D will then get down.
If you find a common factor,
then you can simplify.*

32.

Math Busters

May be sung to the tune of "Ghost Busters"

By JoAnne Lesser, Shelli Haynes, Patricia Lingard, Georgia Hyland, Charles MosKowitz

*If there's something weird in your radical sign,
Who you gonna call? Math Busters.*

*Find a perfect square factor,
Take the square root, bring it outside,
You're a Math Buster!*

*If you have a triangle, with three equal sides,
What are you going to call it?
Equilateral!*

*If you have a triangle, with 2 equal sides,
What are you to call it?
Isosceles!*

*If you have a triangle, with no equal sides,
What are you going to call it?
Scalene!*

*If you have a polynomial of degree two,
What are you going to call it?
Quadratic!*

33.

Multiplication

May be sung to the tune of "Farmer in the Dell"

By Barbara Cain, Joan Sotak, Sue Buchanan

*Positive times positive,
Positive times positive,
Positive times positive,*

Equals positive!

*Negative times negative,
Negative times negative,
Negative times negative,*

Equals positive!

*Unlike signs,
Unlike signs,
If the signs are not alike,
It's a negative!*

34.

Fibonacci

A group of mathematics educators at an FCTM Board meeting suggested two songs for mathematics classes. One is called "Fibonacci" and may be sung to the tune of "Are You Sleeping"

*Fibonacci, Fibonacci, one,
one, two, three, five, eight.
Classroom bells are ringing,
Classroom bells are ringing.
Don't be late, don't be late!*

Repeat in a round

35.

Quadratic Formula

Another song suggested at an FCTM Board meeting may be sung to the tune "Row, row, row, your boat!"

*"X" equals negative "b"
Plus or minus square root
Of b^2 minus four "a" "c"
divided by two "a"!!! Hey!!!*

Repeat in a round

36.

Subtraction

*May be sung to the tune of "If you're happy and you know it"
By Jill Nielsen and daughter Molly Nielsen*

*Subtraction's also known as take away! (take away!)
Subtraction's also known as take away! (take away!)*

*Subtraction's also known as,
Subtraction's also known as,*

Subtraction's also known as take away! (take away!)

*If the bigger's on the bottom you must borrow! (Borrow!)
If the bigger's on the bottom you must borrow! (Borrow!)*

*If the bigger's on the bottom,
If the bigger's on the bottom,*

If the bigger's on the bottom you must borrow!

37.

I'M A LITTLE POLYGON

May be sung to the Tune of "I'm A Little Teapot"

By: Mooney and Nielsen

*I'M A LITTLE POLYGON,
SHORT AND STOUT.
ADD UP ALL MY SIDES,
AND TAKE TWO OUT.
THEN YOU MULTIPLY BY ONE EIGHTY,
THE SUM INSIDE OF ME YOU'LL SEE.*

38.

FCAT/Math

May be sung to the tune of the Village People's "YMCA"

By Jill Nielsen and Katie Mooney

*Young men, there's a place you can be.
And women, you can be there with me.
It's a place where, you can open you mind,
And the big bucks you'll find.*

*If you listen, to you teacher you'll see,
That you too can, pass the F-C-A-T.
And open, all the doors that you see.
You'll have the whole world in your hands.*

*You've go to pass the F-C-A-T.
You've got to listen to your teacher and see.
You'll get every thing that you need to succeed.*

*You've got to pass the F-C-A-T.
You've got to listen to your teacher and see.
You'll get every thing that you need to succeed.
You'll get every thing you need.*

Alternative Chorus

*You've got to learn your M-A-T-H.
You've got to get it, M-A-T-H.
You'll get every thing that you need to succeed.
You'll get every thing you need.*

39.

Perimeter, Area, Volume Song

May be sung to the tune of "Pop goes the weasel"

By Nielsen and Kotter

*Let's have perimeter fun.
A fence we have to build.
Measure the sides and find the sum.
Our obligation's fulfilled.*

*Now, we want to plant some grass.
In our rectangular yard.
Multiply the length times the width.
Area's not so hard.*

*Let's put in a pool and fill it up.
With How much H₂O?
Multiply length times width times height.
And away we go.*

(Verse)

*Perimeter, A straight measure.
Area is squared.
Volume is a cubic thing.
Math we like to sing.*

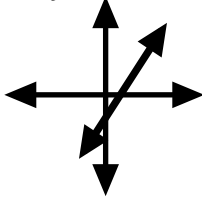
40.

The Slope Dance

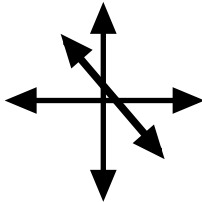
By Jill Nielsen

In Algebra 1 students sometimes have problems remembering what the different types of slope look like on a coordinate plane graph. This will refresh your memory.

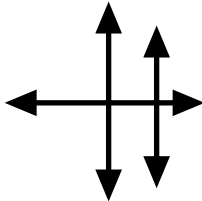
A line with a positive slope rises as the line goes to the right.



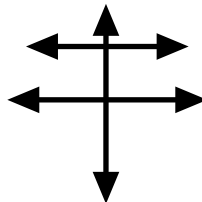
A line with a negative slope goes down as the line goes to the right.



A line with no slope is a vertical line.



A line with a slope of zero is a horizontal line.



Most students can remember which one is positive and which one is negative. However, they have problems remembering which is zero and which one has no slope.

To teach which is which, I chant “NO..0..0.. Slope, NO.. 0..0 Slope” to the chopping motion and the tune of the FSU Seminole team chant. Then students can remember which other one is the zero slope.

After students have this straight, I stand in front of the room and ask students to demonstrate with their arms no slope, zero slope, positive slope, and negative slope. When the students are proficient at demonstrating the correct movement, I give the instructions at a quicker pace and mixed order and we do the..... “Slope Dance”

41.

Slope Intercept Form

May be sung to the tune of "Blow the Man Down"

By Nielsen and Kotter

There's a special equation for Linear Graphs.

$$y=mx+b$$

Slope - intercept form often used in math.

$$y=mx+b$$

m is the slope, rise over run.

$$y=mx+b$$

b's on the y - axis, starts all the fun.

$$y=mx+b$$

42.

Problem Solving Strategies

May be sung to the tune of "Frere Jacques"

By Jill Nielsen and Sheila Kotter

Problem solving

Strategies

Are here for you

Here's what you do:

Draw a little picture;

Make a list or graph; put

diagrams in your plan.

Look for patterns

In the problems;

What the heck,

Guess and check;

Solve a simpler problem;

Did you try it backwards?

Do answers make sense?

They must make sense.

43.

Like-Terms

*May be sung to the tune of "Polly Wolly Doodle"
By Jill Nielsen and Sheila Kotter*

*If you've got an x plus a k ,
You can't add them up, no way!
But if you got an a plus another a ,
Their sum will always be $2a$*

*Now you've got an x times a k
You can multiply xk .
You can multiply unlike terms
To your heart's content all day.*

*Add them up, Add them up.
Only if they are like-terms.
Multiply, Multiply.
Like or unlike terms.*

44.

Adding Fractions II

*May be sung to the tune of "Alouette"
By Jill Nielsen and Sheila Kotter*

*Adding Fractions,
We are adding fractions,
Here's the steps for what you have to do:
You need the same denominator
Then you change the numerator.
Multiply by the same number.*

*Add the numerators,
Keep the same denominator.
Cancel common factors in the end to simplify.*

45.

Many Triangles

May be sung to the tune of "John Jacobs Jingle Himmer Schmidt"

by Jill Nielsen & Sheila Kotter

*Geometry has many triangles, all with three sides,
If the sides and angles, are congruent - that's the same!
Equilateral's it's name.*

*Geometry has many triangles, all with three sides,
If it has two sides or more, congruent - that's the same!
Isosceles is what it's named.*

*Geometry has many triangles all with three sides,
If the measures of the sides, are all different - not the same!
Scalene is what it's named.*

*Geometry has many triangles, three angles inside.
Right angles are the measure, you compare them to.
And if they're less, then it's acute.*

*Geometry has many triangles, three angles inside.
Right angles are the measure, you compare them to.
And if they're more then it's obtuse.*

*Geometry has many triangles, three angles inside.
Right angles are the measure, you compare them to.
And if it's equal, then it's right.*

46.

Exponent Rules

May be sung to the tune of "3 Blind Mice"

by Jill Nielsen & Sheila Kotter

"A" being squared, times "A" being cubed.

Add up the exponents, that's the rule,

$$2 + 3 = 5$$

"A" to the 5th power that's the jive,

Bases the same keep it alive for

"A" being squared, times "A" being cubed.

"A" being squared, that's already cubed.

Multiply the exponents that's the rule.

$$2 \times 3 = 6$$

"A" to the 6th power that's the fix.

Bases the same, remember don't mix for

"A" being squared that's already cubed.

"A" being squared, divides "A" being cubed.

Subtract the exponents, that's the rule.

$$3 - 2 = 1,$$

"A" to the 1st power, this is fun!

Bases the same as we've always done for

"A" being squared, divides "A" being cubed.

"A" to the negative three, it just can't be.

The exponents must be positive, can't you see?

One over "A" to the third, it's true.

A reciprocal / flip's what you have to do.

You can't leave it that way, not the thing to do.

For "A" to the negative three, it just can't be.

47. *Songs Written by Workshop Participants at Fall 1999 FCTM Convention*

PEMDAS

May be sung to the tune of "Doe a Deer"

by Sandy Schneider, Pasco County (Workshop Participant)

P - a parenthesis or set of brackets

E - an exponent with power

M - will multiply all your options

D - divide up all your chores

A - lets add up all our sums

S - subtract and find the difference

Move from left to right and so

the answers will just flow, flow, flow, flow... (Repeat)

48.

The Imaginary Numbers Song

May be sung to the Tune of " I SWEAR"

By Tracey Worrell, Milton High School, Santa Rosa County (Workshop Participant)

*i squared....
is equivalent to negative one.
and i squared...
is the greatest thing under the sun!
i equals i
i cubed equals negative i
i to the fourth equals one....
i squared !*

49.

Songs Written by Workshop Participants at Fall 1999 FCTM Convention

Multiplying Integers

May be sung to the tune of "Frere Jacques"

by Patti Perz (Workshop Participant)

Multiplying Integers

Multiplying Integers

Is easy as pie

Easy as pie

Like signs is positive

$$(+)(+)=(+)$$

$$(-)(-)=(+)$$

Unlike signs is negative

$$(+)(-)=(-)$$

$$(-)(+)=(-)$$

Easy as pie

Easy as pie.

50.

Rounding Whole Numbers

May be sun to the tune of "Old McDonald had a Farm"

by Lewis and Taylor (Workshop Participants)

Rounding whole numbers is a chore,

Pum Pum Pum Pum Pum.

There are rules to follow, such a bore !

Pum Pum Pum Pum Pum.

First identify the place then the digit to the right -

If the digit is five or more,

Add one to the digit at the left.

Pum Pum Pum Pum Pum

First identify the place then the digit to the right -

If its 4 or lower leave it the same.

Change all others to zero.

Pum Pum Pum Pum Pum.

51.

Songs Written by Workshop Participants at Fall 1999 FCTM Convention

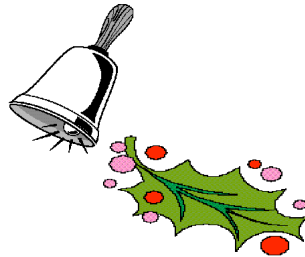
If and Then

May be sung to the tune of "Jingle Bells"

By: Eudora Gaeywoode, Rick Bohlander, and Jay Bishop (Workshop Participants)

*If and then
If and then
Deductive is what it is.
Hypothesis after if
and conclusion after then.*

*Converse,
Converse,
Switch the if and then.
Now you have a conditional statement that
can be true or false.*



*Inverse,
Inverse,
Put negation on both sides.
Now you have a conditional statement
With two squiggly lines.*

*Contra-
Positive,
Switch and then negate.
Now you have a conditional statement
Like the original one.*

*When the "if" is true,
And the "then" is false,
It is a counter example,
And makes the whole thing false.*

*If and then
If and then
Deductive is what it is.
Reasoning is in your life
And with it you'll always win.*

52.

Songs Written by Workshop Participants at Fall 1999 FCTM Convention

The Product Rule in Calculus

May be sung to the tune of the "Oscar Meyer Weiner" Jingle

by Cathy Koos (Workshop Participant)

*The product rule can be hard, I reckon,
Since it's not a product (That the worst!).
It's the first times the derivative of the second
Plus the second times the derivative of the first.*

$$\frac{d}{dx} (f(x) * g(x)) = f(x) * g'(x) + g(x) * f'(x)$$

53.

Tessellations

By Jill Nielsen

May be sung to the tune of "Frere Jacques"

*Tessellations,
Tessellations,
A tiling view,
A tiling view.
Used by Arabic artists,
Used by Arabic artists,
And Escher too
And Escher too.*

*Tessellations,
Tessellations,
With polygons,
Polygons.
All triangles tessellate,
Quadrilaterals tessellate,
Regular hexagons too.
Hexagons too.*

*Tessellations,
Tessellations,
Translation or slide,
Translation or slide.
Or do a rotation,
Or do a rotation.
A circular ride,
A circulate ride.*

54.

Rates and Ratios

May be sung to the tune of "Twinkle Twinkle Little Star"

By Jill Nielsen

*Rates and Ratios comparing,
Numbers of miles and other things.
Fractions may be what we see,
Or colon there may be.
Related numbers there will bring,
Rates and Ratios comparing.*

*Rates pair different units,
So math tasks won't give you fits.
On the road there's miles per hour,
And in the grocery ounces per dollar.
One on top the other sits,
Rates pair different units.*

*Compare like measures, make ratios.
Relationships they will show.
Feet to feet and pound to pound,
A connection can be found.
Relating spuds to potatoes,
Compare like measures, make ratios.*

55.

Proportions Song

*May be sung to the tune of "Row, Row, Row Your Boat"
By Jill Nielsen*

*Two rates, ratios, or fractions,
Equal to each other.
Proportions are what they are called,
And solving them's no bother.*

*Use means-extremes property,
Cross multiply to solve.
Proportions are used everywhere,
When math is involved.*

*Multiply both the means,
Then do the extremes.
Put an equal sign between,
An answer you will glean.*

*The number with the missing part,
Is used then to divide,
Both sides of the equal sign,
Then see what you will find.*

56.

FCAT

*May be sung to the tune of "The Flintstones"
by Jill Nielsen*

*FCAT, we take the FCAT,
The Florida Sunshine Standards test.
We'll even write in math class.
It's a different test from all the rest,*

*Reading, Math, and Writing are now here.
Science is joining them this year.*

*When we get our scores back,
It will tell us if our schools passed,
I hope we're not last,
With the FCAT!*

57.

FCAT test is in Florida Now

by Sheila Kotter

*to the tune of "Santa Claus is Coming to Town"
(For teachers and administrators only)*

*You better watch out,
You better not cheat,
You better make sure they're not absent that week.*

FCAT TEST is in Florida now.

*It tests reading and mathematics too
and there's lots of writing to do.
FCAT test is in Florida now.*

*They take it first in 3rd grade and each year up through 10th,
And each school gets a rating, A-B-C-D or F.*

*Improvement maintaining, too
Don't let scores drag whatever you do.
FCAT test is in Florida now.*

58.

WHEN WE ADD

*May be sung to the tune of "When the Saints Go Marching In"
By Wendy Lane and her students - Pasco County*

Oh when we add,

Oh when we add,

Oh when we add,

We have to see...

All, Sum and Both, In all,

Total, Altogether please!

59.

Find the Number of Diagonals in a Polygon

*May be sung to the Tune of "When Johnny Comes Marching Home"
By: Valerie Henderson, -Okeechobee; Anne Watkins-Escambia;
Eng Ngov-Okeechobee*

To find the number of diagonals in a polygon,

Multiply number of sides; n ; times n minus one.

Divide next by two,

Subtract n , please do...

And the answer to your problem will now be clear to you.

60.

*Math Tunes from the FCTM 2000
Fall Conference
By Workshop Attendees*

Metrics

*May be sung to the tune of "When the Saints Go Marching In"
By: Mary Thigpen & Linda Pytel (aka π -Tel) - Pasco County*

K H D B D C M

*Big King Henry,
Doesn't Believe,
That Dogs Can Meow.
Just follow this pattern,
And then you'll shout, "Oh-Wow!"*

*Metrics are based,
On groups of ten,
Just move the decimal left or right,
That's all there is to the metrics,
And you're score will be all right.*

61.

Factoring

*May be sung to the tune of "Do Re Me"
By: Kay Smitherman- Coakley H.S., Chandra Nazirahmad-Bahamas*

*Factoring is lots of fun,
If you know just what to do.
Find the factors just alike
Then decline is what you do.
When the factor's factored out,
You'll be done and then you'll shout.
"Factoring was fun!" No doubt.
Factoring is lots of fun
OH, OH, OH,
repeat...*

(Last) F_ACT_OR

62.

Pythagorean Theorem Song

*May be sung to the tune of:
"Rock a Bye Baby"*

*By: Kelli Czyzyk- Brandon; Adriana Suarez- Miami;
Larry Orihuela-Dade County; Regina Vanlow- Brooksville*

$$a^2 + b^2 = c^2$$

This is known as the Pythagorean Theorem.

Label the legs with an "a" and a "b".

And then the hypotenuse will be called "c" !

63.

Multiplying & Dividing Fractions (Rationals)

*May be sung to the tune of:
"Yesterday"*

By: Kevin Loftus- Palm Beach

*Multiplying fractions,
First you need to cancel common factors,
From the numerator and denominator,
Then multiply straight across.*

*Dividing Fractions,
All you have to do is multiply,
By the reciprocal of the second one,
Remember to simplify,
Remember to simplify.*

64.

The Powers of i

May be sung to the tune of "Happy Birthday"

By: Cynthia Roberts-Duval County

*i to the zero equals one,
 i to the first equals i ,
 i squared equals negative one,
 i to the third equals negative i ,*

*Now any other power,
Just divide it by four,
And take the remainder,
And that's the new power.*

65.

Sine Song

May be sung to the tune of "Itsy Bitsy Spider"

By: Marge Ticola, Rita Wetsman, Brenda Creel

Opposite Over Hypotenuse is how to find the sine.

Down, down, the Slide-the Hypotenuse in line.

Up the Ladder steps-The opposite side it climbs.

So; the ladder over the slide is how to find the sine.

66.

Inequalities

May be sung to the tune of "Frere Jacques"

By: Lynn & Jill Wolfson and Angeline Martinez

Inequalities, inequalities.

What's the sign?

What's the sign?

I have no idea.

I have no idea.

Help me out!

Help me out!

To tell the difference

Add an "ess"

If it spells "less"

If it spells "less"

Then it is less

if it's not, then greater.

Greater than ,

Greater than.

*< ess
less than*

*ess >
greater than*

67.

*Math Tunes from the FCTM 1998
Fall Conference
By Workshop Attendees*

Congruent Triangles

*May be sung to the tune of:
Mary had a little lamb.*

By: Profulla Singh and Linda Henderson

If a single triangle has two congruent angles, two congruent angles, two congruent angles.

If a single triangle has two congruent angles, then their opposite sides are congruent.

But if different triangles have two congruent angles, two congruent angles, two congruent angles.

But if different triangles have two congruent angles, then do not use this theorem.

68.

Rock Around the Decimal Point

*May be sung to the tune of:
"Rock Around the Clock"*

By: Michele Polk, Terry Murduck, Pam Dell

*Tenths, hundredths, thousandths rock.
Tenths, hundredths, thousandths rock.
Tenths, hundredths, thousandths rock.
We're gonna rock around the decimal point.*

*First you get smaller as you go to the right.
The tenths are the same as a dime, you know.
The hundredths are the pennies
Just a little dough. You know.
We're gonna rock around the decimal point tonight.*

69.

Angles

*May be sung to the tune of:
"Wheels on the Bus"*

By: Jamie Rothrock and Tara Sanders

*The angles of a circle equal 360,360,360.
The angles of a circle equal 360, all the way around.*

*The angles of a triangle equal 180,180,180.
The angles of a triangle equal 180, all added up.*

70.

Slope Song

*May be sung to the tune of:
"Mary had a Little Lamb"*

By: Nancy Kennealy, Helen Fuenfhausen, Sue Ice

*Rise over run is the slope,
is the slope,
is the slope,
Rise over run is the slope.
Rise means Y's on top.*

*Parallel Lines have the same slope,
The same slope,
The same slope,
Parallel Lines have the same slope.
Lines won't intersect.*

*Negative reciprocals,
reciprocals,
reciprocals,
Negative reciprocals.
Are the slopes of perpendiculars.*

71.

Standard Form

*May be sung to the tune of:
"Jingle Bells"*

By: Caroline King, Kathy Myron

$$ax^2 + bx + c = 0$$

*This quadratic's in standard form.
Solve it and be a hero.*

72.

We're Negatively Positive

*May be sung to the tune of:
"The Farmer in the Dell"*

By: Michele Griffin and Chloe Melton

The sum of two negatives is negative.

The product of two negatives is positive.

So when you add you're negative.

And multiply you're positive.

73.

Combining Like Terms

*May be sung to the tune of:
"Satisfaction"*

By: Jill W., Chris H., and Julie M.

*I can't add no unlike terms,
I can't subtract no unlike terms,
I tried, and I tried, and I tried, and I tried.
I can't add no (do, do, do),
I can't subtract no (do, do, do).*

*When I got to Algebra II,
I met some dumb guy named Lou.
He said, "2t plus 3u equals 5tu."
And I said, "Lou, no can do!"
You can't add no (do, do, do)
No unlike terms (no, no, no, no)*

*Hey Hey Hey-(do, do, do)
Don't simplify that way!*

74.

The Line That Never Ends

*May be sung to the tune of:
"This is the Song that Never Ends"*

By: Melinda Grimison and Leslie Ray

*We have a line that never ends,
It goes on and on my friends.
A segment has 2 endpoints,
And a ray has only one.
Rays go on in one direction,
With 2 rays we can have fun
`Cuz....
(repeat)*

75.

To Isolate Variable

*May be sung to the tune of:
"Auld Lang Syne"*

By: Susan Chee-A-Tow and B. J. Foister

*To isolate variable
Subtract or add to both the sides.
Then divide or multiply.
On the left and on the right.*

76.

Mode on the Range

*May be sung to the tune of "Home on the Range"
By Joyce Brown - Pasco County*

*Mode, mode on the range,
Where the mean and the median play.
Where seldom is heard
A non-statistical word.
And math gets more exciting each day !*

77.

Adding on the Number Line
May be sung to the tune of "This Old Man"
by Jill Nielsen

*Adding Numbers, you can see
On the line, is so easy.
Plop on the larger then hop to the right,
The other addend, that's right !*

*Adding Numbers, five and three
On a number line, you see.
Start by plopping, on the number five.
When adding on the number line.*

*Then you mark, above the next
Three numbers up from five, you bet.
Then you hop that three from five.
A sum of eight you'll find.*

*You can do, subtraction too.
On a line, it's fun to do.
Start with the larger, it's the one on top.
You will never want to stop.*

*With a plop, on the minuend.
To the left then we will send.
Hop the number of the subtrahend.
You'll find the difference in the end.*

78.

Jeometry Jingle

*May be sung to the tune of "Jingle Bells"
by Marilyn Jones/Tara Hemphill (Workshop Participants)*

Chorus: *Complements, Supplements
Vertical Angles, too!
I can't keep them in my head,
They mix around like stew...ooo.*

*Complements, Supplements
Linear pairs join in,
Now you've really mixed me up
And I can never win.*

Verse: *(Dashing through the snow)*

*Complements make NINETY,
Supplements - ONE EIGHTY,
Vertical angles are congruent,
Linear pairs are supplements.*

*Compliments make NINETY
Supplements - ONE EIGHTY
Oh what fun it is to learn and sing
An angle song in school.... OH (Chorus)*

79.

Adding Integers

May be sung to the tune of: "Bingo"

By: Nielson, Kotter & Mooney

*There were two numbers with two signs,
But they weren't the same-o.
If we add-um, we really subtract-um.
And the final sign will, come from the larger number.*

*Now two numbers with two signs,
And they are the same-o.
If we add-um, we really add-um,
And the final sign will, come from both the numbers.*

*We've got two more numbers with two signs,
And they're not the same-o.
If we multiply them, or divide them,
Then the final sign will, always be a negative.*

*We've got two more numbers with two signs,
And they're both the same-o.
If we multiply them, or divide them,
Then the final sign will, always be a positive.*

New Songs Fall 2006

Deriving Volume Formulas

By Jill Nielsen

(May be Sung to the tune of "Old McDonald Had A Farm")

Volume formulas are my demise
They escape my brain.
Formulas I then derive
Then I can stay sane.

Area of the base times height.
Then I analyze.
If its a prism or cylinder
I am done.

(Chorus)
But if it comes,
to a point up top.
A cone,
A pyramid,
Anything with a point.
Then multiply it by a third
I have now derived.

Spheres are unique as you can see.
They're looked at differently.
The area of the base is pi r squared.
We up that squared to 3.

(Chorus)
Multiply by 4,
And divide by 3.
Then I have 4 thirds
Pi r cubed.
Now I know I can derive.
And I'll no longer cry.

Volume of a rectangular solid = $l \times w \times h$

Volume of a prism = $B \times h$

Volume of a cylinder = $B \times h$

Volume of a cone = $(B \times h) \frac{1}{3}$

Volume of a pyramid = $(B \times h) \frac{1}{3}$

Volume of a sphere = $\frac{4}{3} (\pi r^3)$

Reading Decimals

by Jill Nielsen

May be sung to the tune of "Hickory Dickory Dock"

Reading decimals can be
Confusing for you and for me.
First you start
Read the whole number part.
Before decimal point you see.

Then you say the word "and"
Where the decimal point stands.
Read the decimal part
Just like at the start.
Read the right most place value at end.

362.742

Three hundred sixty two and seven hundred forty two thousandths

Scientific Notation

by Jill Nielsen

May be sung to the tune of "Pop Goes the Weasel"

To change to scientific notation
The decimal you place first.
The absolute value less than 10
But greater than or equal to one.

How many places must you move
The original decimal to get there?
Count them up and make it the power of 10.
Exponent rising like a stair.

Which direction did you go
When you moved the decimal?
Left makes it neg. and right makes positive
Powers for the 10 that's all.

Now you can place a great big X
Between the number and 10's powers.
The X means multiplication here
From scientific notation don't cower.

(Chorus)
Scientific Notation
We can change to it.
When we use these basic steps.
It's an easy trip.

FCAT Lessons Learned

by Jill Nielsen

May be sung to the tune of Yankee Doodle

Since the FCAT came to be
Learned lessons came in handy.
To help us with our grid response
And keep our scores real dandy.

Justify to left or right.
It doesn't make a difference.
Don't bubble under a blank space
As all bubbles have significance.

Leading zeros are okay
Or at the right of the decimal.
As long as values stay the same
It won't make your score dismal.

(Chorus)
FCAT scores can climb up
With answers gridded correctly.
Lessons learned can help us all
And effect our math scores directly.

Percent questions gridded here
Have sometimes been a problem.
Make sure you give the percent asked
And not in decimal or fraction.

Mixed numbers won't work in the grid.
The machine just will not score them.
Change them to improper ones.
And keep on singing this anthem.

(Chorus)
FCAT scores can climb up
With answers gridded correctly.
Lessons learned can help us all
And effect our math scores directly.

Angles

by Katie Mooney

May be sung to the tune of Here Comes Santa Clause.

Oh if parallel, Oh if parallel,
So many angles the same.
Alternate interior and corresponding,
Too many angles to name.
Same side interior are supplementary.
I need to keep this straight.
So study your theorems and you postulates,
Cause Geometry's really great!