

## *Song 1 (F-1) Fractions*

Fractions, fractions  
Fractions, a part of a whole.  
Fractions, fractions  
Fractions, a part of a whole.

Can you find the fractions all around?

Let's take an apple and cut it in two.  
Now you have two halves waiting for you.  
Let's take a cherry pie and cut it in threes.  
Now you have thirds, as tasty as can be.

Can you find the fractions all around?

Fractions, fractions  
Fractions, a part of a whole.  
Fractions, fractions  
Fractions, a part of a whole.

Can you find the fractions all around?

Let's take a house, with four rooms all the same size.  
That house is now in fourths, right before your eyes.  
Let's take a dozen eggs, just look inside the box.  
Each egg is one-twelfth  
These fractions really rock!

Can you find the fractions all around?

Fractions, fractions  
Fractions, a part of a whole.  
Fractions, fractions  
Fractions, a part of a whole.

## *Song 2 (F-2) Least Common Multiple*

It's the least common multiple!  
The least common multiple.  
It's the least common multiple!  
The least common multiple.

The smallest number evenly divisible  
By two or more numbers  
Is the least common multiple.

To find it, list prime factors  
Of the numbers you need  
You'll have to multiply if you wish to  
succeed.

Multiply each factor,  
The most times it appears  
In any of the numbers, it really will be  
clear.

Let's try three numbers.  
Let's have some fun.  
3, 4 and 6  
Come on everyone!

3 is 3  
4 is  $2 \times 2$   
6 is  $2 \times 3$   
Now here's what to do.

$2 \times 2 \times 3$   
The answer's 12 you see.  
That's the least common multiple.  
That's right!

It's the least common multiple!

The least common multiple.

The smallest number evenly divisible  
By two or more numbers  
Is the least common multiple.

To find it, list prime factors  
Of the numbers you need  
You'll have to multiply if you wish to  
succeed.

Multiply each factor,  
The most times it appears  
In any of the numbers, it really will be  
clear.

Let's try three numbers.  
Let's have some fun.  
3, 6 and 15  
Come on everyone!

3 is 3  
6 is  $2 \times 3$   
15,  $3 \times 5$   
Now can you see?

$3 \times 2 \times 5$   
The answer's 30  
That's the least common multiple.  
That's right!

It's the least common multiple!  
The least common multiple.  
It's the least common multiple!  
The least common multiple.

### *Song 3 (4-1) The Axiom Commutivity*

The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!

An axiom is something we accept as true.  
Like adding up two numbers in a line.  
You can add  $3+4$  or  $4+3$   
And you'll get the same answer every time.

That's commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!

An axiom is something we accept as true.  
Like when you want to try to multiply.  
You can work it  $2 \times 5$  or  $5 \times 2$   
And you'll get the same answer every time.

That's commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!

An axiom is something we accept as true.  
Like when your adding money with your coins.  
A quarter and a dime or a dime and a quarter,  
You'll get the same answer every time.

That's commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!  
The axiom, commutivity!

### *Song 4 (4-2) Measurement*

So much to measure.  
It's a pleasure!  
So much to measure.

So much to measure.  
It's a pleasure!  
So much to measure.

Every day, measuring away!  
Length, area, volume, time, weight, mass,  
temperature  
Length, area, volume, time, weight, mass,  
temperature

Length is measured in inches, feet, yards  
and miles  
That's the English system we've been  
using for a while.  
Length can come in millimeters,  
centimeters too  
Or meters and kilometers that's the  
decimal length to choose.

Every day, measuring away!  
Length, area, volume, time, weight, mass,  
temperature

Weight is measured in our land in ounces,  
pounds and tons.  
Weight and mass come in milligrams,  
grams, kilograms  
What fun!

Liquid volume comes in ounces, cups,  
pints, quarts, gallons  
Milliliters and those liters are another way  
of liquid measuring.

Every day, measuring away!  
Length, area, volume, time, weight, mass,  
temperature

Area is length in 2 dimensions,  
That is length unit squared.  
Square inches, feet, yards, acres, miles  
Always squared.

Area comes in millimeters and centimeters  
squared  
Meters, hectares, kilometers  
The area is always squared.

Every day, measuring away!  
Length, area, volume, time, weight, mass,  
temperature

Volume is length in three dimensions, that  
is length unit cubed  
cubic inches, cubic feet, cubic yards, cubic  
miles are volumes too.  
Volume comes in milliliters cubed,  
centimeters cubed and cubic kilometers.  
Volume is length in three dimensions!  
That is length unit cubed.

Every day, measuring away!  
Length, area, volume, time, weight, mass,  
temperature

Temperature is measured In Fahrenheit  
That's the system that we use.  
In other places in the world,  
Celsius is what they choose.

Every day, measuring away!  
Length, area, volume, time, weight, mass,  
temperature

So much to measure.  
It's a pleasure!  
So much to measure.  
It's a pleasure!  
So much to measure.

## *Song 5 (4-3) Geometry*

Let's learn about geometry!  
Let's learn about geometry!

Geo means shape.  
metry means to measure  
It's fun to measure shapes in any kind of weather.  
Some shapes are smooth with curves.  
Some sharp with many sides  
When you're working with geometry  
It's shapes of many kinds!

Let's learn about geometry!  
Let's learn about geometry!

Polygons are closed shapes with many different sides.  
Like trapezoids and hexagons and triangles.  
Some shapes are smooth and curved  
Like the circle of a ring.  
There are ovals and ellipses, where something's missing!

Shapes of many kinds  
That's geometry!

Geo means shape.  
metry means to measure  
It's fun to measure shapes in any kind of weather.  
Some shapes are smooth with curves.  
Some sharp with many sides  
When you're working with geometry  
It's shapes of many kinds!

Let's learn about geometry!  
Let's learn about geometry!

## *Song 6 (4-4) Percentages*

We're looking for percentages.  
Looking for percents.  
Can you find the percentages?  
Can you find the percent?

A fraction or a ratio  
With a hundred down below  
That's the denominator  
A fact that you must know.

All of something is 100 percent every time  
Half of something's 50 percent  
Half again is 25%.

We're looking for percentages.  
Looking for percents.  
Can you find the percentages?  
Can you find the percent?

Bake a whole pizza and that's 100 percent  
Slice it in half for your friend  
You each have 50 %.

We're looking for percentages.  
Looking for percents.  
Can you find the percentages?  
Can you find the percent?

Take a dollar and you have 100 percent  
Change it to 4 quarters  
And each coin is 25 %.

We're looking for percentages.  
Looking for percents.  
Can you find the percentages?  
Can you find the percent?

Ten marbles in a box is 100 percent  
Give a marble to 10 friends  
Each friend has 10%.

A fraction or a ratio  
With a hundred down below  
That's the denominator  
A fact that you must know.

## *Song 7 (4-5) Triangle Properties*

Triangles!  
Four different kinds  
Triangles!  
How many can you find?

Scalene triangles have no sides the same.  
Three different lengths is the scalene frame.  
A right triangle has one right angle  
Put two together and you'll get a rectangle  
An equilateral triangle has all three sides the same  
An isosceles triangle has two equal sides.

Triangles!  
Four different kinds

Scalene triangles have no sides the same.  
Three different lengths is the scalene frame.  
A right triangle has one right angle  
Put two together and you'll get a rectangle  
Equilateral triangles have all three sides the same  
An isosceles triangle has two equal sides.

Triangles!  
Four different kinds

scalene, right triangle, equilateral, isosceles!  
scalene, right triangle, equilateral, isosceles!

Triangles!  
Four different kinds  
Triangles!  
How many can you find?

## *Song 8 (4-6) Solving Word Problems*

Solving word problems  
Let's find the plan  
Solving word problems  
Now I understand

Solving word problems  
Let's find the plan  
Solving word problems  
Now I understand

What's the unknown we want to know?  
Are there any more unknowns yet to show?  
What are the facts, write the symbols down  
Explore, discover, solve!

Just think about the problem at hand  
It tells you a story you'll need to understand.  
There's a part that's missing, we call it the unknown  
When you find out what it is, you'll be heading for home.

What's the unknown we want to know?  
Are there any more unknowns yet to show?  
What are the facts, write the symbols down  
Explore, discover, solve!

Explore the facts important to the tale  
Then find the symbols, and things begin to sail.  
Isolate the numbers to solve the unknown  
The solution you seek will soon be shown!

What's the unknown we want to know?

Are there any more unknowns yet to show?  
What are the facts, write the symbols down  
Explore, discover, solve!

Solving word problems  
Let's find the plan  
Solving word problems  
Now I understand

Solving word problems  
Let's find the plan  
Solving word problems  
Now I understand

Listen to the next three bars  
Each bar has eight notes, just eight notes!  
 $n$  is the total number of notes  
 $n = 3 \times 8$

The unknown is 24!

Solving word problems  
Let's find the plan  
Solving word problems  
Now I understand

Solving word problems  
Let's find the plan  
Solving word problems  
Now I understand

What's the unknown we want to know?  
Are there any more unknowns yet to show?  
What are the facts, write the symbols down  
Explore, discover, solve!  
Explore, discover, solve!



## *Song 9 (4-7) Negative Numbers*

When you're looking at numbers on the number line  
Look for zero every time  
Positive numbers to the right you'll see  
Negative numbers to the left.

Any numbers less than zero  
All have a minus sign you know  
They keep moving to the left from zero  
Gettin' more negative as they go.

Negative numbers -1 -2  
Negative numbers -3 -4  
Negative numbers -5 -6  
Heading to the left to infinity.

When you're looking at numbers on the number line  
The value gets greater when you move to the right  
The value gets less when you move to the left  
Remember this you'll pass the test.

For every positive number there's a negative number  
When you add them together you get zero.  
2 plus minus 2 is zero  
Minus 2 plus 2 is zero.

Negative numbers -1 -2  
Negative numbers -3 -4  
Negative numbers -5 -6  
Heading to the left to infinity.

When you're looking at numbers on the number line  
Look for zero every time  
Positive numbers to the right you'll see  
Negative numbers to the left.

### *Song 10 (4-8) Powers*

The powers of a number  
Are products of itself.  
Powers (whisper)

The powers of 2  
Are multiplied by itself.  
Powers (whisper)

2 to the first power, that is 2.  
2 to the second power, 4 waiting for you.  
2 to the third power,  $2 \times 2 \times 2$ , that's 8.  
These are powers of...

2 to the fourth power, that's 16.  
2 to the fifth power, 32.  
No other number but the power of 2  
Divides into, a power of two.

The powers of a number  
Are products of itself.  
Powers (whisper)

The powers of 3  
Are multiplied by itself.  
Powers (whisper)

3 to the first power, that is 3  
3 to the second power, 9 you'll see  
3 to the third power,  $3 \times 3 \times 3$ , 27

These are powers of ...

3 to the fourth power, 81  
3 to the fifth, 243  
No other number but the power of 3  
Divides into, a power of three.

The powers of a number  
Are products of itself.  
Powers (whisper)

The powers of 10  
Are multiplied by itself.  
Powers (whisper)

10 to the first power, that is 10  
10 to the second power, 100  
10 to the third power,  $10 \times 10 \times 10$ ,  
1,000

These are powers of...

10 to the fourth power, 10,000  
10 to the fifth, 100,000  
Count the zeroes then you'll know,  
Each power of 10 has as many zeroes  
As the power, that's so!

The powers of a number  
Are products of itself.  
Powers (whisper)

### *Song 11 (5-1) Divisors*

When you break a number into equal parts  
Each part is a divisor.  
When you break a number into equal parts  
Each part is a divisor.

Clap four times with me  
Then clap two times in between.

2 divides 4  
It's plain to see.

When you break a number into equal parts,  
Each part is a divisor.  
When you break a number into equal parts,  
Each part is a divisor.

Count eight times with me  
Then count to four twice in between.

4 divides 8  
It's plain to see.

When you break a number into equal parts,  
Each part is a divisor.  
When you break a number into equal parts,  
Each part is a divisor.

Take six steps with me  
Then take three steps back, two times please.

2 divides 6  
It's plain to see.

Take six more steps with me  
Then take two steps back, three times please.

3 divides 6  
It's plain to see.

When you break a number into equal parts,  
Each part is a divisor.  
When you break a number into equal parts,  
Each part is a divisor.

## *Song 12 (5-2) Decimals*

Decimals, parts of a whole.  
Decimals, ten equal parts.

We're going to take short trip of ten steps.  
1-2-3-4-5-6-7-8-9-10- ten steps  
Ten steps, one short trip.

Now take one step back that's one tenth.  
Take a second step back, that's two tenths.  
Every step along the way is one tenth every day.

One tenth is 0.1  
Two tenths is 0.2  
Three tenths is 0.3  
Four tenths is 0.4

Decimals, parts of a whole.  
Decimals, ten equal parts.

We're going to take short trip of ten steps.  
1-2-3-4-5-6-7-8-9-10 ten steps  
Ten steps, one short trip.

(Now let's do hundredths!)

Now take one step back that's one hundredth.  
Take a second step back, that's two hundredths.  
Every step along the way is one hundredth every day.

One hundredth is .01  
Two hundredths is .02  
Three hundredths is .03  
Four hundredths is .04

Decimals, ten equal parts.  
Yeah!

### *Song 13 (5-3) Long Division*

Divide, multiply, subtract, check, bring down.

Divide, multiply, subtract, check, bring down.

Dividing a number into equal parts  
Is the coolest thing in town.

The dividend's the number  
The one you will divide.  
The divisor splits the dividend  
In equal parts, oh my!

The answer is the quotient  
The one you're looking for  
If it doesn't come out even  
A remainder is in store.

Divide by the divisor  
Then multiply it back  
Subtract those numbers  
To stay on the track.

Now check that number  
Smile don't frown  
If it's less than the divisor  
Bring the next number down.

Divide, multiply, subtract, check, bring down.

Divide, multiply, subtract, check, bring down.

Dividing a number into equal parts  
Is the coolest thing in town.

The dividend's the number  
The one you will divide.  
The divisor splits the dividend  
In equal parts, oh my!

The answer is the quotient  
The one you're looking for  
If it doesn't come out even  
A remainder is in store.

Divide by the divisor  
Then multiply it back  
Subtract those numbers  
To stay on the track.

Now check that number  
Smile don't frown  
If it's less than the divisor  
Bring the next number down.

Divide, multiply, subtract, check, bring down.

Divide, multiply, subtract, check, bring down.

Dividing a number into equal parts  
Is the coolest thing in town.

Divide, multiply, subtract, check, bring down.

Divide, multiply, subtract, check, bring down.

Divide, multiply, subtract, check, bring down.

*Song 14 (5-4) Solving the Unknown*

There is something I don't know  
That I want to know,  
That's an unknown.

There is something I don't know  
That I want to know,  
That's an unknown.

When I add a 2 to something to get 5  
That something is an unknown.  
We often give our unknowns a letter name  
like x  
(Or any other letter)  
When we add the x to the equation it  
makes it better  
To find what's missing, the part that I  
don't know  
I can always find the unknowns!

$2 + x = 5$  3 is the unknown!  
 $x = 3 + 4$  The unknown is 7  
 $5 \times a = 10$  That a is 2  
3 times x is 6 The x is 2  
That makes it true.

There is something I don't know  
That I want to know,

That's an unknown.

There is something I don't know  
That I want to know,  
That's an unknown.

When I add a 2 to something to get 5  
That something's an unknown.  
We often give our unknowns a letter name  
like x  
(Or any other letter)  
When we add the x to the equation it  
makes it better  
To find what's missing, the part that I  
don't know  
I can always find the unknowns!

$4 + x = 9$  5 is the unknown!  
 $x = 7 + 4$  The unknown is 11  
 $4 \times c = 12$  That c is 3  
5 times x is 10  
The x is 2  
That makes it true.

There is something I don't know  
That I want to know,  
That's an unknown.

## *Song 15 (5-5) 3-D Geometry*

Sphere, cone, cube, cylinder  
3-D geometry!  
Sphere, cone, cube, cylinder  
3-D geometry!

A sphere can roll it's curved all around  
It has no points and no flat ends.  
A sphere is round like a basketball.  
That's the shape of a sphere my friend.

A cone has a flat end and one point  
In a circle it will roll.  
A cone looks like a party hat  
Or just like an ice cream cone.

Sphere, cone, cube, cylinder  
3-D geometry!  
Sphere, cone, cube, cylinder  
3-D geometry!

A cube is a shape with six sides  
It cannot roll, but it can slide.  
It looks like a block or a number die,  
With each face square you can stack them high.

A cylinder has two flat ends  
It can roll and roll and roll.  
A cylinder has no points my friend  
A can, a straw, that's the end.

Sphere, cone, cube, cylinder  
3-D geometry!  
Sphere, cone, cube, cylinder  
3-D geometry!

## *Song 16 (5-6) Angles*

Everywhere you look there are angles, angles  
Everywhere you look there are angles.  
Everywhere you look there are angles, angles, angles!

Angles are made when a straight line rotates  
By degrees from a starting point.  
Angles are sharp or blunt or straight  
At the starting joint.

Make an "L" with your finger and thumb  
That's a right angle.

Make a "V" with your first two fingers  
That's an acute angle.

When the time says 3 o'clock  
That's a right angle.

When you make a split with your legs  
That's an obtuse angle.

Everywhere you look there are angles, angles  
Everywhere you look there are angles.  
Everywhere you look there are angles, angles, angles!

Angles are made when a straight line rotates  
By degrees from a starting point.  
Angles are sharp or blunt or straight  
At the starting joint.

Make an "L" with your finger and thumb  
That's a right angle.

Make a "V" with your first two fingers  
That's an acute angle.

When the time says 3 o'clock  
That's a right angle.

When you make a split with your legs  
That's an obtuse angle.

Everywhere you look there are angles, angles  
Everywhere you look there are angles.  
Everywhere you look there are angles, angles, angles!



## *Song 17 (5-7) Prime Numbers*

Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Like, 2 3 5 7 11 13 17 19

When you break up a number into all it's  
equal parts  
You may find a number that can only be  
broken  
Into equal parts of 1 or just itself  
These are prime numbers, that's simply  
how you tell.

Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Like, 2 3 5 7 11 13 17 19

Prime numbers are always odd it's true  
The only even prime is the number 2.  
Broken into equal parts of 1 or just itself  
When you know the rule, prime numbers  
are so cool.

Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Like, 2 3 5 7 11 13 17 19

There is no largest prime number,  
If you look around  
You will always find a larger prime,  
It always will be found  
Broken into equal parts of 1 or just itself  
It's fun to look for primes  
It's fun when you can tell they're . . .

Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Like, 2 3 5 7 11 13 17 19

Here are some tricks  
To help you find a prime  
When a number ends with an even digit  
It cannot be prime.

Add all the digits together in a number  
You will find the sum, your work is nearly  
done.  
Look for...

Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Primes!  
Are you primed for the primes?  
Primes!

## *Song 18 (5-8) Charts*

Charts!

Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts. (Charts!)  
Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts.

A pie chart's a circle divided into slices  
Each slice has a number and percent  
Add them all together, it's 100  
100 percent.

Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts.

A line chart's a series of data points  
Connected by a continuous line  
Line charts help you see the things  
Relating to time.

Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts.

An area chart is a line chart filled in beneath the line  
That connects each point  
Area charts are time related  
Filled in below the data points.

Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts.

A bar chart's a set of labeled bars  
Longer bars have more value  
Each bar compares things just for you  
Vertical or horizontal.

Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts.

A scatter chart's a set of random points  
At first you may not know  
A scatter chart's answer is hard to see  
But the answer will show.

Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts. (Charts!)  
Pie charts, line charts, area charts. (Charts!)  
Bar charts, scatter charts, everywhere charts. (Charts!)

## *Song 19 (6-1) Theorems*

Theorems!  
Theorems!  
Theorems!  
Theorems!

Can you prove it?  
It's a theorem.  
Make a statement and prove it so.  
If a statement is a theorem  
Let the facts help you to know.

A statement's the hypothesis  
And it may be false or true  
Just use the logic in your mind  
The hypothesis you'll prove...  
Or, disprove!

Theorems!  
Theorems!  
Theorems!  
Theorems!

Here's a statement:  
Seven days from today will be the same day as it is today.  
Let your logic help you prove it.  
Seven days in a week  
So seven days from today, is the same day of the week.  
We have a theorem! We've proved it true!

Theorems!  
Theorems!  
Theorems!  
Theorems!

Can you prove it?  
It's a theorem.  
Make a statement and prove it so.  
If a statement is a theorem  
Let the facts help you to know.

A statement's the hypothesis  
And it may be false or true  
Just use the logic in your mind  
The hypothesis you'll prove...  
Or, disprove!

Theorems! Theorems! Theorems! Theorems!

*Song 20 (6-2) Greatest Common Divisor/ Greatest Common Factor*  
"GCF"

It's the greatest common divisor.  
It's the greatest common factor.  
That's a GCF!

When you're looking for a number  
That evenly divides  
Into 2 or more numbers  
Here's something to try.

List the prime factors,  
Of the numbers you choose  
Then find the common factors  
And you can't lose.

Multiply those factors  
The common ones you find  
And the greatest common factor  
Will pop into your mind.

It's the greatest common divisor.  
It's the greatest common factor.  
It's a GCF!

12 and 30 are easy to try  
Just list the prime factors  
Then right before your eyes  
The common factors 2 and 3 appear  
Multiply those numbers, the GCF is clear  
It's a 6!

Multiply those factors  
The common ones you find  
And the greatest common factor  
Will pop into your mind.

It's the greatest common divisor.  
It's the greatest common factor.  
That's a GCF!

If there is only one common prime factor  
The GCF is done.  
If there are no common prime factors  
The GCF is one.

## *Song 21 (6-3) Probability Universe*

Probability universe,  
The set of all the possible outcomes of an experiment.  
Probability universe,  
The set of all the outcomes.  
Let's experiment!

Flip a coin, it's heads or tails.  
There are 2 possible outcomes.  
The universe is 2, heads or tails,  
Two possibilities.

Probability universe,  
The set of all the outcomes.  
Let's experiment!

Throw a die and it's a number  
From 1 to 6.  
The universe is 6, each chance  
One-sixth probability.

Probability universe,  
The set of all the outcomes.  
Let's experiment!

Pick a day,  
Any day of the week.  
The universe is 7,  
7 outcomes in this set,  
One-seventh probability.

Probability universe,  
The set of all the outcomes.  
Let's experiment!

No matter what the universe  
The possible outcomes  
The probabilities  
Always add to one.

Probability universe,  
The set of all the possible outcomes of an experiment.  
Probability universe,  
The set of all the outcomes.  
Probability!

## *Song 22 (6-4) Linear Equations*

A linear equation is an equation  
That represents a straight line.  
A linear equation is an equation  
That represents a straight line.

When you see a graph  
With an x and y axis  
Look for a straight line on it.

This line has a slope that rises or falls  
With a constant rate upon it.  
The rate of change, stays the same,  
With respect to x and y.

A linear equation is an equation  
That represents a straight line.

A straight line parallel to the x axis  
Has a slope of zero.  
It doesn't rise or fall, it's flat that's all  
It has a slope of zero.

A straight line parallel to the y axis  
Has an infinite slope.  
It cannot be described by a linear  
equation  
It has an infinite slope.

A linear equation is an equation  
That represents a straight line.

Let's measure the slope  
Make a right triangle  
From any 2 points on the line.  
Find the change in the coordinates  
Then divide x into y.

When a straight line hits the y axis  
That is known as the intercept.  
If the line passes through the y it's true  
You have found the intercept.

A linear equation is an equation  
That represents a straight line.

Let's measure the intersect  
That's the place  
Where the line hits the y axis.  
What is y when x is zero  
That's the intersect, now you know.

A linear equation is an equation  
That represents a straight line.  
A linear equation is an equation  
That represents a straight line.

## *Song 23 (6-5) Rational Numbers*

Let's look at those rational numbers.  
Let's look at the rational ones.  
Let's look at those rational numbers  
Always written as a ratio or a fraction.

The fraction  $\frac{1}{2}$   
It has, the ratio of 1 to 2  
1 over 2 is a rational number  
Every fraction in the world is rational too.

The number 7 can be written  
As a ratio of 7 to 1  
Seven over one is a rational number  
Finding rational numbers is so much fun.

Every decimal number that comes from  
Dividing denominator into numerator  
Is a rational number  
Because it came from a ratio.

Let's look at those rational numbers.  
Let's look at the rational ones.  
Let's look at those rational numbers  
Always written as a ratio or a fraction.

The number zero point nine  
Is a rational number too  
Just because, it can be written  
As 9 tenths waiting for you.

The number zero point three three  
Is a rational number too  
Just because, it can be written  
As 33 hundredths waiting for you.

Every decimal number that comes from  
Dividing denominator into numerator  
Is a rational number  
Because it came from a ratio.

Let's look at those rational numbers.  
Let's look at the rational ones.  
Let's look at those rational numbers  
Always written as a ratio or a fraction.

## *Song 24 (6-6) Pythagorean Theorem*

Pythagorean Theorem works every time!

A right triangle has an angle of  $90^\circ$   
(degrees).

And right next to the angle are the sides  $a$   
and  $b$

The third side  $c$ , the hypotenuse, is easily  
found

When you learn to use, the Pythagorean  
Theorem,  
It's the one to choose.

In a right triangle, just find the two  
smallest sides.

Then square each one and add them  
together,  
You'll find a surprise.

The sum of squared  $a + b$   
Is equal to the square of  $c$

The Pythagorean Theorem works every  
time!

The Pythagorean Theorem works every  
time!

The sum of squared  $a + b$   
Is equal to the square of  $c$

The Pythagorean Theorem works every  
time!

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Is equal to the square of  $c$

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The Pythagorean Theorem works every  
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time!

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The Pythagorean Theorem works every  
time!

The sum of squared  $a + b$   
Is equal to the square of  $c$

The Pythagorean Theorem works every  
time!

The Pythagorean Theorem works every  
time!

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



## *Song 25 (6-7) Square Roots*

Let's root! Let's root!  
Let's root for the root.  
Let's root! Let's root!  
Let's root for the root.

A number times itself gives us a square.  
Just multiply one side by itself.  
You'll find the area of a square.  
The square root's the length of one of its sides.

Let's root! Let's root!  
Let's root for the root.  
Let's root! Let's root!  
Let's root for the root.

When you know a square's area  
The sides are all the same.  
Just choose one length on any side  
And you'll be winning the square root game.

Let's root! Let's root!  
Let's root for the root.  
Let's root! Let's root!  
Let's root for the root.

The square root of 36...6!  
The square root of 49...7!  
The square root of 81... That's a 9!  
The square root of 100... is 10!

Can you find the root?  
Can you find the root?  
Can you find the root?

Let's root! Let's root!  
Let's root for the root.  
Let's root! Let's root!  
Let's root for the root.