### Eston's Algebra Party Page



# **Literal Equation**

In this equation a variable is solved in relation to the other variables.

d=vt / (1/2) * a	Start by multiplying by three.
d/a=vt / (1/2)	To eliminate the fraction, multiply by 2.
1/2(d/a)=vt	Divide both sides by v to get t by itself
[1/2(d/a)] /v=t	The answer

We've got the music!



# **Linear Equation**

	The equation	n is solved	so that a r	numerical a	answer is i	reached fo	r the variable.
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7x+7=2(x+1)	Start by getting rid of the parentheses. Do this by multiplying 2 by everything in the parentheses.
7x+7=2x+2	You want the variables on one side. Subtract 7 from the 2.
7x=2x-5	Subtract the 2x.
5x=-5	Divide by 5 to isolate the variable.
x=-1	The answer is –1. You now put –1 in for x in the
	original problem to see if it works.

And the girls!



### **Equations of a Line**

The following are three different ways to find the equation of a line.

#### Slope-Intercept form

### y=mx+b where m=slope and b=y-intercept

Write in slope intercept form with slope of 5 and through the point (1,3)	
y=mx+b, so 3=5(1) +b	Substitution. Put in the numbers you know.
3=5+b	Simplify the problem by multiplying.
-2=b	To find b, subtract 5 from both sides. b=-2
y=5x-2	Re-write the problem in slope-intercept form to
	finish the problem.

And even the crazy drunken mouse!



## **Standard Form**

Written ax+by=c. Write the following problem in standard form. It is in slope-intercept form already.

y=-2/3x+9	Start by multiplying by three.
3y=-2y+9	Standard form is ax+by=c so you have to get the ax
	to the other side. Do this by adding it to the other
	side.
2x+3y=9	It is in standard form, and the problem is finished.

#### Point Slope Form

#### Point slope form is $y-y_1=m(x-x_1)$

Solve in slope intercept form using point slope form: with slope=4 and goes through the point (4,7)	Start by putting in the numbers that you know.
y-7=5(x-4)	simplify
y-7=5x-20	Now arrange your terms to get the problem into slope-intercept form.
y=5x-27	It is now in point slope form and you are done.

Party's over, you don't have to go home but you can't stay here.



Links

Click <u>here</u> for other partying websites from my classmates.

Click <u>here</u> for my school's website.

Click <u>here</u> for help on calculators and other TI products.