Algebra 1 Benchmark

Art Club Proposal

Introduction

Our proposal is something that will allow students to freely express themselves without the harsh judgements of society. It would be something akin to a safe space. Students wouldn't be forced to conform educational requirements and can communicate their ideas through art. Art is something that I find to be incredibly cathartic. Most students tend to have a lot of emotions and pent up aggression. Instead of releasing their emotions in a healthy manner, they contain their aggression.

School is stressful enough, coupled with home life (and for some, lack thereof), anxiety can be a product of these experiences. That's where our solution comes into play: an Art Club. Catharsis is a metaphor that originated from Aristotle. He compares the consequence of a tragedy on the human mind to a drug on the human body. F.L Lucas refers to it as purging the human soul from "excessive passions."

Trauma and everyday stressors can be applied to the metaphorical logic. The same way talking through your problems is proven to be therapeutic, interacting through art is just as remedial.

Students can join through our sign up sheets which will be located at every floor of SLA. We would fundraise through events. Our project will benefit the community because students will be able to have a creative outlet after school and be surrounded by a calming environment. Our improvement fits in with SLA's core values. It includes collaboration because the students would work together on tasks and projects. It would also include the presentation component because students would present their art to their fellow peers.

Items Needed for the Art Club:

The table displays the items needed for the art club and prices for each item. It comes to a total of $987.30. This leaves us with $1012.70.

Item	Product Name	Quantity	Source	Website Link	Cost per Item	Total Cost
Paint	Artlicious - Acrylic Paint Set..	20	Amazon	paint	$13.99	$279.80
Fabric Spray Paint	Fabric Spray Paint, 9-Pack	10	Amazon	spray	$13.99	$139.90
Paint brushes	Loew-Cornell 245B Brush Set, Pack of 25, Multi Color	15	Amazon	brushes	$6.56	$98.40
Canvases	US Art Supply 11 X 14 inch Professional Artist..	20	Amazon	canvas	$18.96	$379.20
T-shirts	Men Plain Slim Fit	30	Wish	shirts	$3.00	$90.00

Fundraising:

In order to fund our proposal, we decided to fundraise. Our fundraising ideas include: a photo booth, popcorn sale, babysitting, morning coffees, a bake sale, and a raffle.

The tables below list the items necessary to buy for fundraising. It includes the source of the product as well as the cost per item and the price we would sell the item. Some items are set prices such as the speakers, which would be the winning item of the raffle.

Fatima:

Fundraising ideas ~

Item	Product Name	Source	Website Link	Cost per Item	Shipping Costs	Any other costs	Amount I would sell the item for
Tickets	Staples Double Ticket Roll, Red, 2000/Roll, 1 Roll	Staples	Tickets	$10.49	$9.49	No	$3
Speakers	Amazon Echo Dot	Amazon	Speakers	$29.99	Free	No	$0
Cookies	Pepperidge Farm Soft Baked Cookies, Montauk Milk Chocolate, 8.6 Oz	Amazon	Cookies	$2.50	0	No	$2 per 2 cookies
Cake	La Bree's Bakery Mini Red Velvet Cupcakes	Shoprite	Cakes	$3.69	0	No	$1

Popcorn	Pop Secret Microwave Popcorn, Movie Theater Butter, 6-Count Box	Amazon	[Popcorn](#)	$3.68	0	No	$2

Aniya: Fundraising ideas ~

Iitems	Product names	source	Website link	Cost per item	Shipping cost	Any other cost	Amount I would sell the item for
Photo booth,	Photo booth rental	Photo Booth	[photo booth](#)	$99.00	$25	no	$10

Baby wipes	Boogie Wipes..	babysitting	baby wipes	$2.85	0	No	$5
Coffee maker	BLACK+DECKER 12-Cup Programmable Coffeemaker, Black, DLX1050B	Amazon	Coffee maker	$19.99	0	none	$2

<u>Equations for profit:</u>

We created equations to help represent the amount of money we would spending in contrast to the amount of money we would be making.

Aniya

Tickets	Calculations	Profit
10	10(10)-198	$-98.00
20	10(50)- 198	$302.00
50	10(100)-198	$802.00
100	10(200)-198	$1802.00
t	10t-198	

My equation is 10t-198, tickets stands for **t** and profit for **p**, to solve it I decided to use $100 for my profit. $10 represents how much I'm selling it for and $198 stands for the amount of money spent renting the photobooth. Then I set up my equation as $100= $10t - $198. First I did inverse operations of sub into add, so I added both sides with 198 from $100 and $198. Then I got $298=$10t then divide each side by 10t which gets me $29.8.

p=profit ~$100
t=tickets - $10 tickets ~ how much I'm selling it for
-$198 ~ stands for the amount of money spent renting the photobooth
p=10t-198

100=10t-198
+198   +198
298=10t
10t 10t
=29.8

Baby Wipes	Calculations	Profit
1	5(1)-2.85(1)	$2.15
5	5(5)-2.85(5)	$10.75
10	5(10)-2.85(10)	$21.50
20	5(20)-2.85(20)	$43.00
b	5b-2.85b	

My equations represent **p** for profit and **b** for baby wipes. My equation p= $5b-$2.85b, for my profit I decided to put $500. $5 stands for how much I'm selling it and $2.85 is the amount cost per item. First to figure out the problem is I subtracted my like terms first and got $2.15. $500=$2.15b then I divided both sides with $2.15 and my answer turned out to be $232.5.

Equation:
p=profit ~ $500
b=baby wipes - $5 ~ how much I'm selling it for
-$2.85 is the amount cost per item
p=5b-2.85b

500=5b-2.85b
500=2.15b
2.15   2.15
=232.50 tickets

Coffee	Calculation	Profit
1	2(1)-19.99	$-17.99
5	2(5)-19.99	$-10.99
10	2(10)-19.99	$0.02
20	2(20)-19.99	$20.01
c	2c-19.99	

My **p** represents profit and **c** is for the coffee maker. My equation is set up to be p=$2c-$19.99, for my profit I put the price as $200, $2 for how much I'm selling the coffee maker for, and $19.99 for the cost per item. To start off I started setting up my equation for $200=$2c-$19.99, then I did opposite of operations from sub to add, then I got $219.90=2c then I divided each side with with $2c and got $109.95.

Equation:
p=profit ~ $200
c=coffee maker - $2 for how much I'm selling coffee maker
-$19.99 for how much it cost for per item
p=2c-19.99

200=2c-19.99
+19.99   +19.99
219.9 = 2c
2c   2c
=109.95 coffee maker

Fatima

Raffle:

Number of tickets (t)	Calculations	Profit (p)
10	30-.5-9.49-29.99	$-9.98
50	150-2.5-9.49-29.99	$108.02
100	300-5-9.49-29.99	$255.52
t	13t-.05t-9.49-29.99	

I first multiplied the number of tickets I needed by the price I would sell it which was $3. I then subtracted the unit price which is $0.05. Then, I subtracted the flat fees which are the shipping and handling costs ($9.49) and the price of the prize of the raffle ($29.99). I did this with ea h of the number of tickets and the variable t as well,

- Let p=profit
- Let t= tickets
- 3t represents $3 for every ticket
- -(.05t+9.49+29.99) represents the amount of money being subtracted from the money being made.

p= 3t -(.05t+9.49+29.99)

Bake Sale

Number of Cookies (c)	Calculations	Profit (p)
10	20-3.2	$16.80

50	100-16	$84.00
100	200-32	$168.00
c	2c-.32c	

For each row in the table, I multiplied the number of cookies by how much money I would sell them for ($2). Then I subtracted the number of cookies by the price I bought them for which is $0.32. I did this for every value including *c.*

- p=profit
- c=cookies
- 2c represents $2 times every cookie sold
- -.32c represents minus 32 cents times every cookie sold.

p= 2c-.32c

Number of Cakes (k)	Calculations	Profit (p)
10	10-3.1	$6.90
50	50- 15.5	$34.50
100	100-31	$69.00
k	k-.31k	

For the cakes, I sold each cake for $1. So, I multiplied each cake by the amount of money I would sell it for. Then, I subtracted the number of cakes by the price I bought them for which is $0.31. I did this for every value including k (cakes).\
- p=profit
- c=cookies
- 1k represents $1 times every cake sold
- -.31k represents minus 31 cents times every cake sold

p=k-.31k

Number of Popcorn Bags (b)	Calculations	Profit (p)
10	20-6.2	$13.80
50	100-31	$69.00
100	200-62	$138.00
b	2b-.62b	

I multiplied the number of bags of popcorn being sold by the amount of money I would sell each for, $2. Then I subtracted the price I bought each bag for times the number of bags being sold which was $0.62. I did this for every value including b, bags of popcorn.

- p=profit
- b=bags of popcorn
- 2b represents $2 times each bag of popcorn
- -.62b represents minus 62 cents times each bag of popcorn

p=2b-.62b

Goals:
Our goals includes the amount of money we would like to receive from each fundraiser.
This is basically our targeted amount of money from each fundraiser.

Raffle:
183 tickets would be needed to reach my initial goal for the raffle, $500.
Mathematical Work:
p=profit
t=tickets
p= 3t -(.05t+9.49+29.99)
500=3t-.05t-9.49-29.99
500   = 2.95t-39.48
+39.48   +39.48

539.48/2.95= 2.95t/2.95
182.87 = t
183 tickets

     For this example, my targeted amount of money was $500. I plugged this in as
my profit. I then distributed the negative sign to each term within the parentheses. Then,
I combined like terms. I then cancelled out 39.48 by adding it to both sides of the
equation. Then I divided each side by $2.95 since we have to use the opposite
operation to cancel out terms. I was left with 182.87 tickets. Since I know we cant have
182.87 tickets sold, I rounded my answer to 183 tickets

     Check Work:
500= 3(183) -(.05(183)+9.49+29.99)
500= 549-9.15-9.49-29.99
500=500.37
I plugged in 183 tickets as *t* (tickets). Then I combined like terms and solved for *t.*
Because we rounded 182.87 to 183, I expected the rounded answer to be a little higher
than 500.

Bake Sale
149 cookies and 363 cakes are needed to reach my goal of $500 for this fundraiser.
Mathematical Work:

p=profit

c=cookies

Cookies: p= 2c-.32c

250=2c-.32c

250/1.68= 1.68c/1.68

148.81=c

149 cookies

For this equation, my targeted amount of money needed from the cookies was $250. I plugged in 250 as my profit. Then, I combined like terms and solved for c by using order of operations. I did this by using opposite operations. Upon dividing 1.68 from either side of the equation, I was left with 148.81 cookies. Knowing that 148.81 cookies cannot be sold, I rounded my answer to 149 cookies

Check Work:

250= 2(149)-.32(149)

250= 250.32

To check my work, all I did was plug in the 149 as c. I knew that my answer would be slightly higher since I rounded up.

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p=profit

k=cakes

Cakes: p=k-.31k

250=k-.31k

250/.69=.69k/.69

362.32=k

363 cakes

For this equation, I simply plugged 250 as p since $250 was my goal profit. Then, I combined like terms and divided n69 from either side of the equation. Knowing that I couldn't sell 362.32 cookies, I rounded my answer to 363 cookies.

Check Work:

250= 363-.31(363)

250=250.47

To check my work, all I did was plug 363 as k since it represents the number of cakes. I knew my answer would be slightly higher due to the fact that I rounded my original answer.

Popcorn Sale

p=profit

b=bags of popcorn

p=2b-.62b
500=2b-.62b
500/1.38=1.38b/1.38
362.32=b
363=b
363 bags of popcorn'

For this equation, I plugged in 500 as p. This is because my goal amount of money was $500. I then combined like terms. Then, I divided either side of the equation by 1.38. I was left with 362.32. I rounded this to 363 because I can't sell 362.32 bags of popcorn.

Check Work:
500= 2(363)-.62(363)
500= 500.94

To check my work, I simply plugged in 363 as b. I then simplified. I knew my answer would be slightly higher than 500 due to the fact that I rounded 362.32 to 363.

Aniya ---->>>
photobooth

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t=tickets - $10 tickets ~ how much I'm selling it for
-$198 ~ stands for the amount of money spent renting the photobooth
p=10t-198

100=10t-198
+198   +198
298=10t
10t 10t
=29.8

Babysitting

My equations represent **p** for profit and **b** for baby wipes. My equation p= $5b-$2.85b, for my profit I decided to put $500. $5 stands for how much I'm selling it and $2.85 is the amount cost per item. First to figure out the problem is I subtracted my like terms first and got $2.15. $500=$2.15b then I divided both sides with $2.15 and my answer turned out to be $232.5.

Equation:

p=profit ~ $500

b=baby wipes - $5 ~ how much I'm selling it for

-$2.85 is the amount cost per item

p=5b-2.85b

500=5b-2.85b

500=2.15b

2.15   2.15

=232.50 tickets

<u>Conclusion</u>:

In conclusion, I believe that an Art Club would be an amelioration for the SLA community. As an art club, it would explore all aspects of art including photography and music. There are incredibly creative minds in SLA who haven't the opportunity to express themselves.

I think art is something that is not only part of our everyday life, but also a necessity. I think it also fits into SLA's core values through collaborating and presentations. It would be an important addition to the SLA community.