

# Algebra improvement plan

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# Introduction

For our SLA project we are deciding to build a skatepark outside in the courtyard. This skatepark will benefit many people including skateboarders, bmx riders (or bikers in general), scooter riders, rollerbladers and more. This park will not only benefit those riders by helping them grow in skill but it will also provide entertainment for kids that might just be sitting around that aren't doing anything.

The steps we will have to go through to follow through with this skatepark plan is making the blueprint, search what materials we need, make sure the materials stays in budget, and have fundraisers to get the money for the skatepark. Well this project will improve the slabeer community by providing entertainment for the people who just be sitting around outside. This project fits with the core values because we are going to ask questions about how to make the ground smooth, research what materials we need, collaborate on helping other riders build up their skills, we are going to present what the skatepark is going to look like, and we are going to reflect how much we accomplish.

# Bm task 2

Item	product	quantity	source	Website link	Cost per item	Total cost
Wood	Ply wood	20 sheets	Home depot	<a href="https://www.homedepot.com/p/Sheathing-Plywood-Common-15-32-in-x-4-ft-x-8-ft-Actual-0-438-in-x-48-in-x-96-in-20159/206827282">https://www.homedepot.com/p/Sheathing-Plywood-Common-15-32-in-x-4-ft-x-8-ft-Actual-0-438-in-x-48-in-x-96-in-20159/206827282</a>	\$22.65	\$453
Pvc pipe	coping	2 pipes	Home depot	<a href="https://www.homedepot.com/p/2-in-x-10-ft-280-PSI-Schedule-40-PVC-DWV-Plain-End-Pipe-531137/100161954">https://www.homedepot.com/p/2-in-x-10-ft-280-PSI-Schedule-40-PVC-DWV-Plain-End-Pipe-531137/100161954</a>	\$8.73	\$17.46
Skate paint	5 gallon bucket of skate paint	2 buckets	Ocr ramps	<a href="https://www.ocramps.com/product/ramp-skate-paint-5-gallons/">https://www.ocramps.com/product/ramp-skate-paint-5-gallons/</a>	\$375.	\$750
wood	2 by 8 wood planks	10 wood planks	Home depot	<a href="https://www.homedepot.com/p/2-in-x-4-in-x-96-in-Premium-Kiln-Dried-Whitewood-Stud-161640/202091220">https://www.homedepot.com/p/2-in-x-4-in-x-96-in-Premium-Kiln-Dried-Whitewood-Stud-161640/202091220</a>	\$3.39	\$33.9
					Final cost	\$1,254.36

# Bm task 3 (Ellis)

Item	Product name	Source	Website link	Cost per item	Shipping cost	Any other cost	Amount I would sell the item for
food	ramen	amazon	<a href="https://www.amazon.com/Maruchan-Ramen-Variety-Flavors-Pack/dp/B0131AUVAE/ref=sr_1_3_a_it?ie=UTF8&amp;qid=1513305940&amp;sr=8-3&amp;keywords=ramen+noodles">https://www.amazon.com/Maruchan-Ramen-Variety-Flavors-Pack/dp/B0131AUVAE/ref=sr_1_3_a_it?ie=UTF8&amp;qid=1513305940&amp;sr=8-3&amp;keywords=ramen+noodles</a>	\$0.50	free	Cost or the whole pack \$12.17	\$1.00
drinks	Kool aid	bj's	<a href="http://www.bjs.com/kool-aid-jammers--4--pk-6-oz-.product.300000000000180587">http://www.bjs.com/kool-aid-jammers--4--pk-6-oz-.product.300000000000180587</a>	\$0.26	0	Cost for the whole pack \$10.49	\$0.75 each
Clothing	tshirts	Custom ink	<a href="https://www.customink.com">https://www.customink.com</a>	Around \$10.00	none		\$15.00 or \$20.00

# Bm task 4 (Ellis)

ramen:

1	$1(1.00 - 0.50)$	\$0.50
2	$2(1.00 - 0.50)$	\$1.00
3	$3(1.00 - 0.50)$	\$1.50
4	$4(1.00 - 0.50)$	\$2.00
x	$x(1.00 - 0.50)$	\$0.50x

Equation-  $y = 0.5x$

1	$1(0.75 - 0.26)$	\$0.49
2	$2(0.75 - 0.26)$	\$0.98
3	$3(0.75 - 0.26)$	\$1.47
4	$4(0.75 - 0.26)$	\$1.96
x	$x(0.75 - 0.26)$	\$0.49x

Equation-  $y = 0.49x$

1	$1(30 - 20.95)$	\$9.05
2	$2(30 - 20.95)$	\$18.10
3	$3(30 - 20.95)$	\$27.15
4	$4(30 - 20.95)$	\$36.2
x	$x(30 - 20.95)$	\$9.05x

Equation-  $y = 9.05x$

# Bm task 5 (Ellis)

- $Y = 0.5x$
- $500 = 0.5x$
- $500/0.5 = 0.5x/0.5$
- $1,000 = x$

For #1 I need to get a \$500 dollar profit so I will sub 500 for y and divide each side by 0.50 because that is how much i'm making off of each cup of ramen. So after I do that x would be equal to 1,000 meaning I would have to sell at least 1,000 cups of ramen to gain a profit of \$500.

- $Y = 0.49x$
- $500 = 0.49x$
- $500/0.49 = 0.49x/0.49$
- $1,021 = x$

For #2 I need to get a \$500 dollar profit so I will sub 500 for y and divide each side by 0.49 since that's how much i am going to be gaining off of each kool aid pouch I sell. After doing that x would be equal to 1,020.40816 (1,021) meaning that I will have to sell at least 1,021 pouches to make a \$500 profit.

- $Y = 9.05x$
- $500 = 9.05x$
- $500/9.05 = 9.05x/9.05$
- $56 = x$

For #3 I need to get a \$500 dollar profit so I will sub 500 for y and divide each side by 9.05 because that is how much i'm making off of selling each shirt. After that x would be equal to 55.2486188 (56) meaning I would have to sell at least 56 shirts to proffit \$500.

# Bm task 3(samson)

Items product source website link  
 cost per item shipping my sell cost

pens	Round Stic Ballpoint Pens, Medium Point, 1.0 mm, Translucent Barrel, Black Ink,	office max	<a href="https://www.officedepot.com/a/products/664011/BIC-Round-Stic-Ballpoint-Pens-Medium/">https://www.officedepot.com/a/products/664011/BIC-Round-Stic-Ballpoint-Pens-Medium/</a>	\$2	n o n e	\$4 per pen	none
shirt	Hanes® Men's 6Pk Crew Neck T-Shirts With Fresh IQ - White	Targe t	<a href="https://www.target.com/p/hanes-174-men-s-6pk-crew-neck-t-shirts-with-fresh-iq-white/-/A-14492631#lnk=sametab&amp;preselect=14450616">https://www.target.com/p/hanes-174-men-s-6pk-crew-neck-t-shirts-with-fresh-iq-white/-/A-14492631#lnk=sametab&amp;preselect=14450616</a>	\$14	3	\$18 per shirt	none
glove s	Men's Fold Over Mitten With Fleece Lined - Goodfellow & Co™ Gray One Size	target	<a href="https://www.target.com/p/men-s-fold-over-mitten-with-fleece-lined-goodfellow-co-153-gray-one-size/-/A-52217026#lnk=sametab">https://www.target.com/p/men-s-fold-over-mitten-with-fleece-lined-goodfellow-co-153-gray-one-size/-/A-52217026#lnk=sametab</a>	\$10	n o n e	\$13 per set	none

# Bm task 4

Pens

shirts

1	$4 \times 1 - 2 \times 1$	\$2	1	$14 \times 1 - 18 \times 1 - 3$	4-3
5	$4 \times 5 - 2 \times 5$	\$10	5	$14 \times 5 - 18 \times 5 - 3$	20-3
10	$4 \times 10 - 2 \times 10$	\$20	10	$14 \times 10 - 18 \times 10 - 3$	40-3
20	$4 \times 20 - 2 \times 20$	40	20	$14 \times 20 - 18 \times 20 - 3$	80-3
p	$4 \times P - 2 \times P$	2p	p	$14 \times p - 18 \times p - 3$	4p-3
equation:	$p = 4p - 2p$		equation:	$p = 18p - 14p - 3$	4p-3

Gloves

(samson)

	1	$10 \times 1 - 13 \times 1$	3
	5	$10 \times 5 - 13 \times 5$	15
	10	$10 \times 10 - 13 \times 10$	30
	20	$10 \times 20 - 13 \times 20$	60
	p	$P \times 10 - 13 \times p$	3p



# Bm task 5 (samson)

- $p = 4p - 2p$  so what I did was minus the original price by the price I'm selling it for. also I am gaining more money than I sell.
- $433 = 4p - 2p$
- $+2p \quad +2p$
- $435p = 4p$
- $4p \quad 4p$
- $108.75 = 4p$
- $4 \quad 4$
- $27 = p$   $p = 18p - 14p - 3$  what I did was minus the original price by the price I'm selling it for and minus the flat shipping. also, I am gaining more money than I sell.  $433 = 18p - 14p - 3 + 3$
- $4p + 3 \quad 436 = 4p \quad 4 \quad 4 \quad 109 = p$

$p = 13p - 10p$  what I did was minus the original price by the price I'm selling it for. I am gaining more money than I sell it for  
 $433 = 13p - 10p \quad 433 = 3p \quad 3 \quad 144 = p$