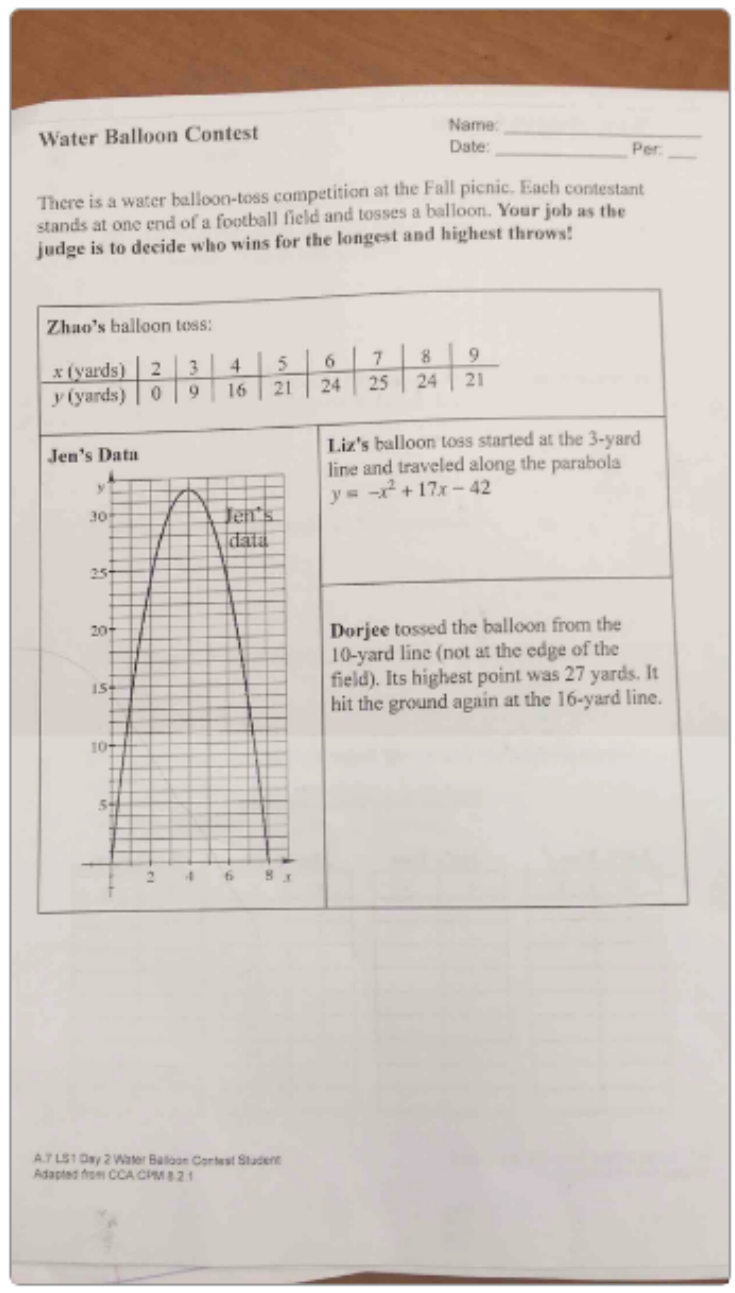


Water Balloon Contest

Name: _____
Date: _____ Per: ___

There is a water balloon-toss competition at the Fall picnic. Each contestant stands at one end of a football field and tosses a balloon. **Your job as the judge is to decide who wins for the longest and highest throws!**

Zhao's balloon toss:

x (yards)	2	3	4	5	6	7	8	9
y (yards)	0	9	16	21	24	25	24	21

Jen's Data

Liz's balloon toss started at the 3-yard line and traveled along the parabola $y = -x^2 + 17x - 42$

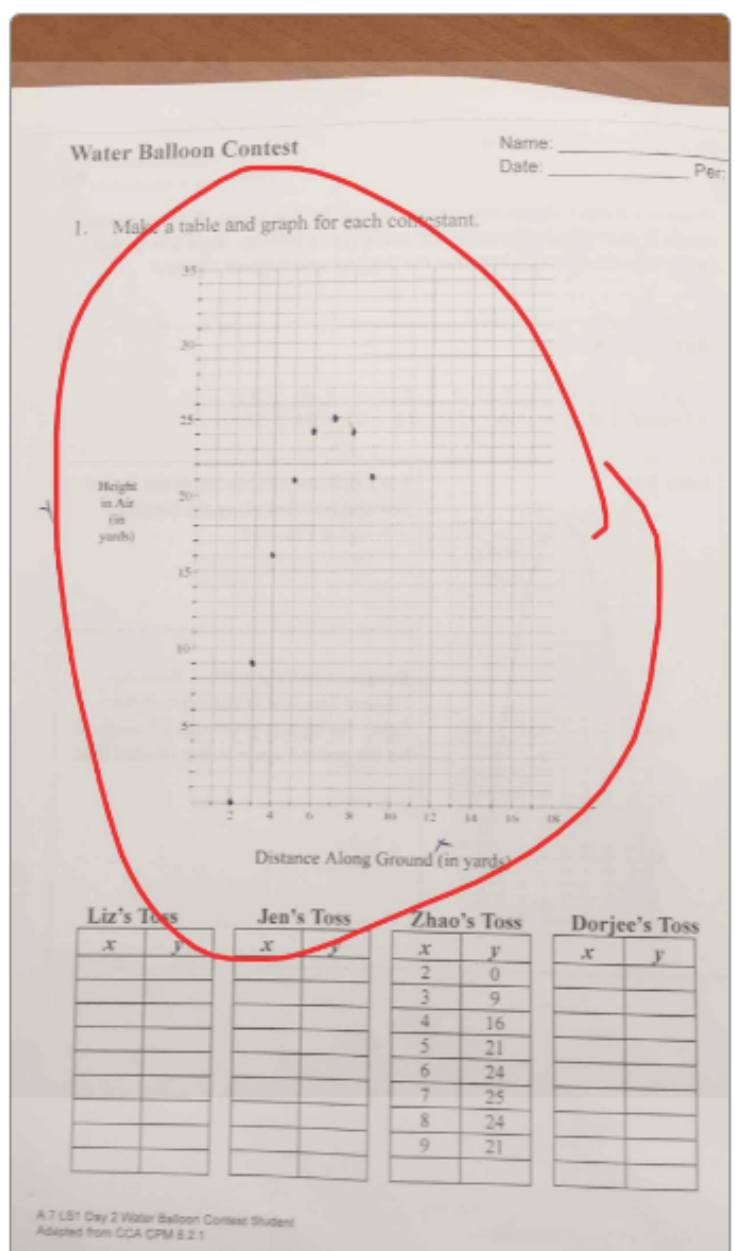
Dorjee tossed the balloon from the 10-yard line (not at the edge of the field). Its highest point was 27 yards. It hit the ground again at the 16-yard line.

A.7 LS1 Day 2 Water Balloon Contest Student
Adapted from CCA CPM 8.2.1

Mar 17th 11:01:59 am

Hi! I will be your tutor for this session. How are you?

Mar 17th 11:02:34 am



Water Balloon Contest

Name: _____
Date: _____ Per:

1. Make a table and graph for each contestant.

Liz's Toss x	y	Jen's Toss x	y	Zhao's Toss x	y	Dorjee's Toss x	y
				2	0		
				3	9		
				4	16		
				5	21		
				6	24		
				7	25		
				8	24		
				9	21		

A.7 LS1 Day 2 Water Balloon Contest Student
Adapted from CCA CPM 8.2.1

Mar 17th 11:02:44 am

Is that your work ?

Mar 17th 11:03:11 am

Hi sir I am trying to figure out Jens data

Mar 17th 11:03:38 am

Should I start with 0 for x and y?

Mar 17th 11:04:04 am

Please give me a moment to review your problem.

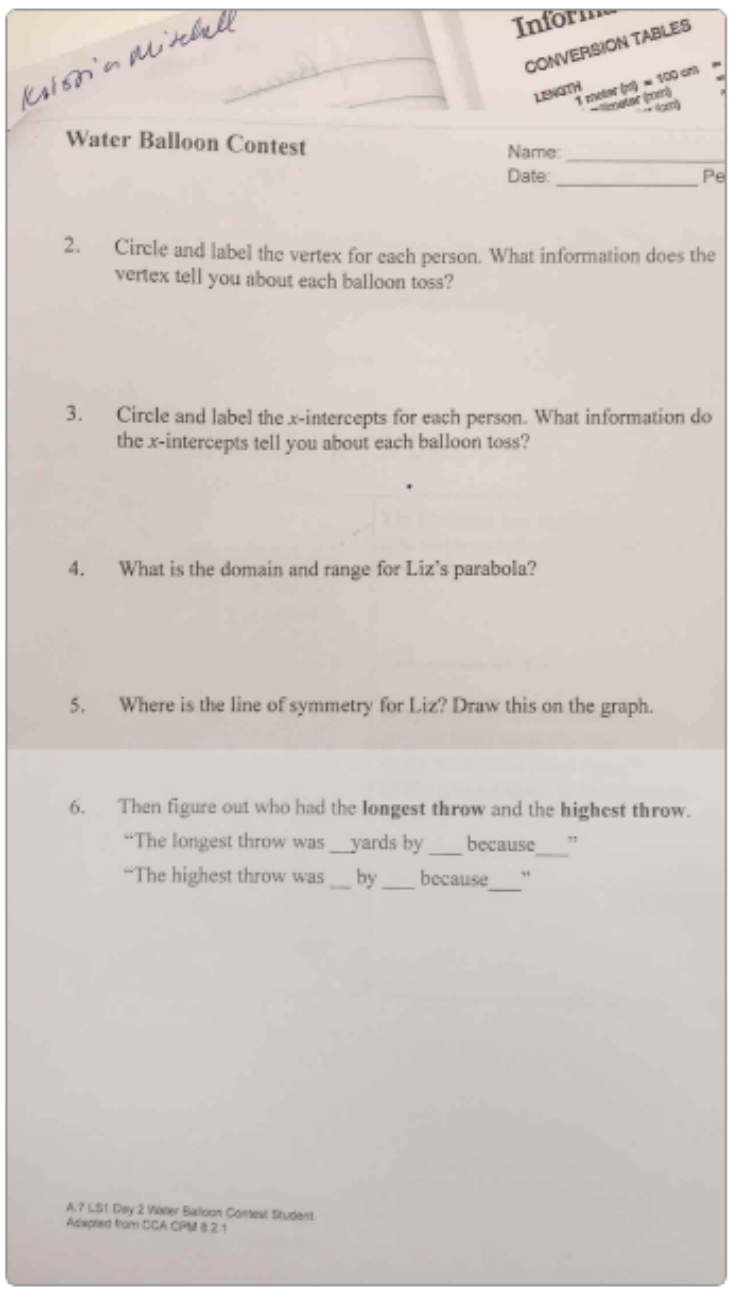
Mar 17th 11:04:29 am

Yes that's my work I started with the easiest way to plot

Mar 17th 11:04:47 am

Okay

Mar 17th 11:05:39 am



Water Balloon Contest

Name: _____

Date: _____ Pe

2. Circle and label the vertex for each person. What information does the vertex tell you about each balloon toss?

3. Circle and label the x-intercepts for each person. What information do the x-intercepts tell you about each balloon toss?

4. What is the domain and range for Liz's parabola?

5. Where is the line of symmetry for Liz? Draw this on the graph.

6. Then figure out who had the **longest throw** and the **highest throw**.
"The longest throw was __yards by ___ because___"
"The highest throw was __ by ___ because___"

Mar 17th 11:06:05 am

Okay

Mar 17th 11:06:49 am

Please give me some time please review your problem

Mar 17th 11:07:10 am

You have done well so far

Mar 17th 11:08:03 am

Good Job !

Mar 17th 11:08:15 am

I want to start with problem 1. Thank you.

Mar 17th 11:08:23 am

Sure

Mar 17th 11:08:43 am

Can u answer my question about Jen

Mar 17th 11:09:07 am

Sure

Mar 17th 11:09:37 am

Foe Jen can you try to plot points from the given graph ?

Mar 17th 11:10:09 am

I'll try

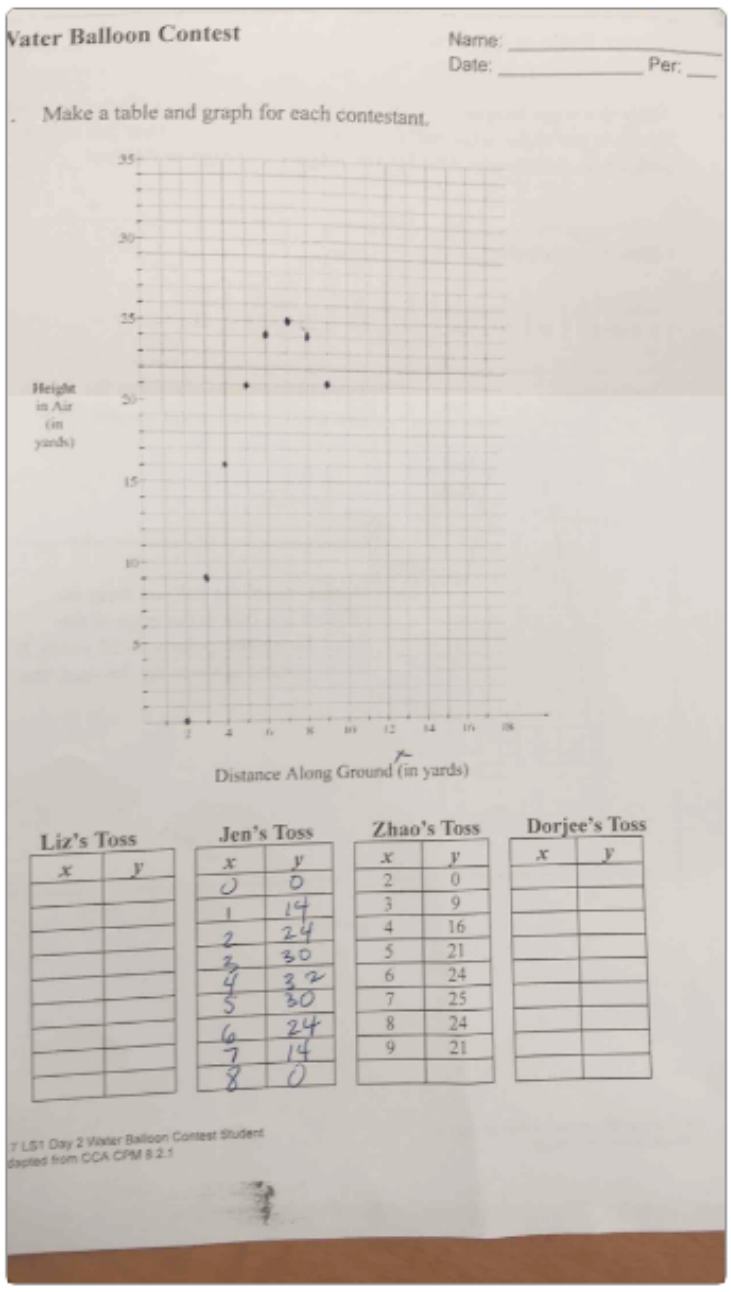
Mar 17th 11:12:00 am

Sure !

Mar 17th 11:12:12 am

Please try and share your work

Mar 17th 11:12:18 am



Mar 17th 11:14:51 am

Hey the points are predictable going up and down!

Mar 17th 11:15:19 am

How do I start with Liz?

Mar 17th 11:15:44 am

That table is perfect

Mar 17th 11:15:54 am

Good Job !

Mar 17th 11:15:56 am

Your so nice!

Mar 17th 11:16:09 am

You're

Mar 17th 11:16:24 am

For Liz at what value x has started ?

Mar 17th 11:16:32 am

Thank you !

Mar 17th 11:16:38 am

Can you try for Liz now ?

Mar 17th 11:18:00 am

I don't understand that question

Mar 17th 11:18:02 am

Not a problem !

Mar 17th 11:18:11 am

X^2?

Mar 17th 11:18:53 am

Liz's balloon toss started at what yard line ?

Mar 17th 11:19:03 am

Oh! 3!

Mar 17th 11:19:43 am

That's Correct !

Mar 17th 11:19:59 am

So we will start at x=3 and fill the table

Mar 17th 11:20:11 am

Can you try that step ?

Mar 17th 11:20:17 am

I don't know what to do next. Should I solve the equation with x?

Mar 17th 11:21:17 am

X=3 I mean

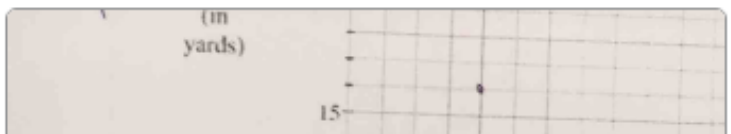
Mar 17th 11:21:32 am

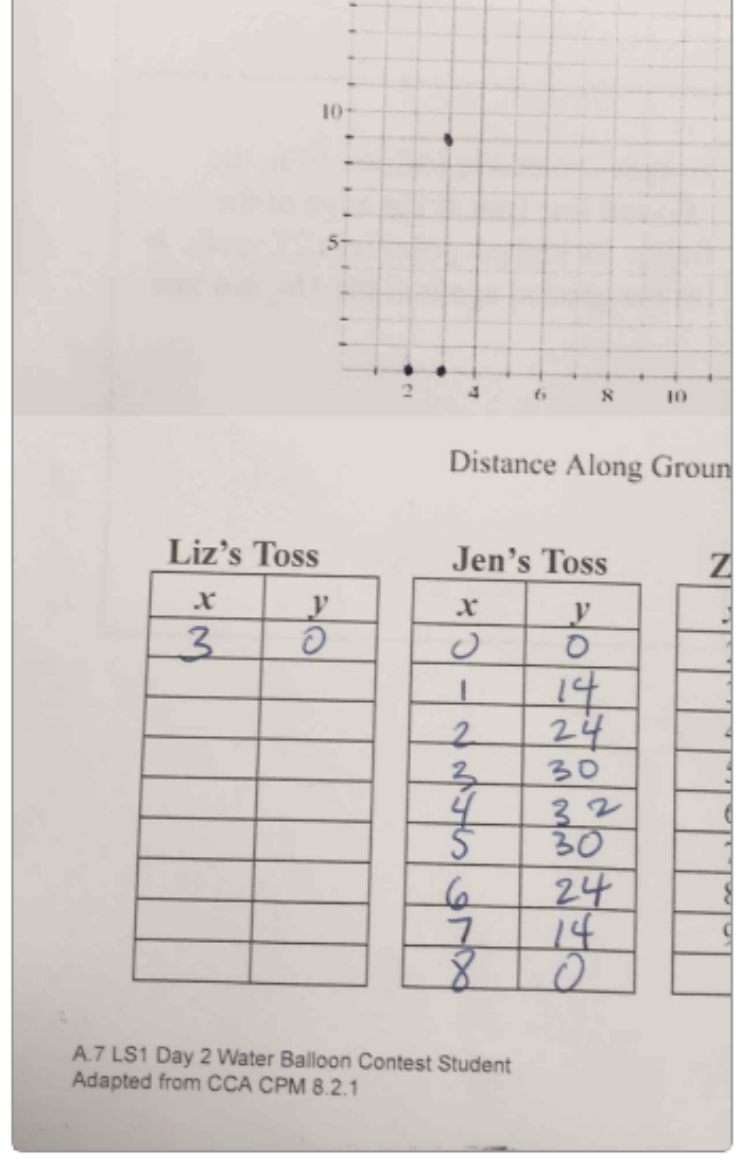
We need to find y value when x=3

Mar 17th 11:22:14 am

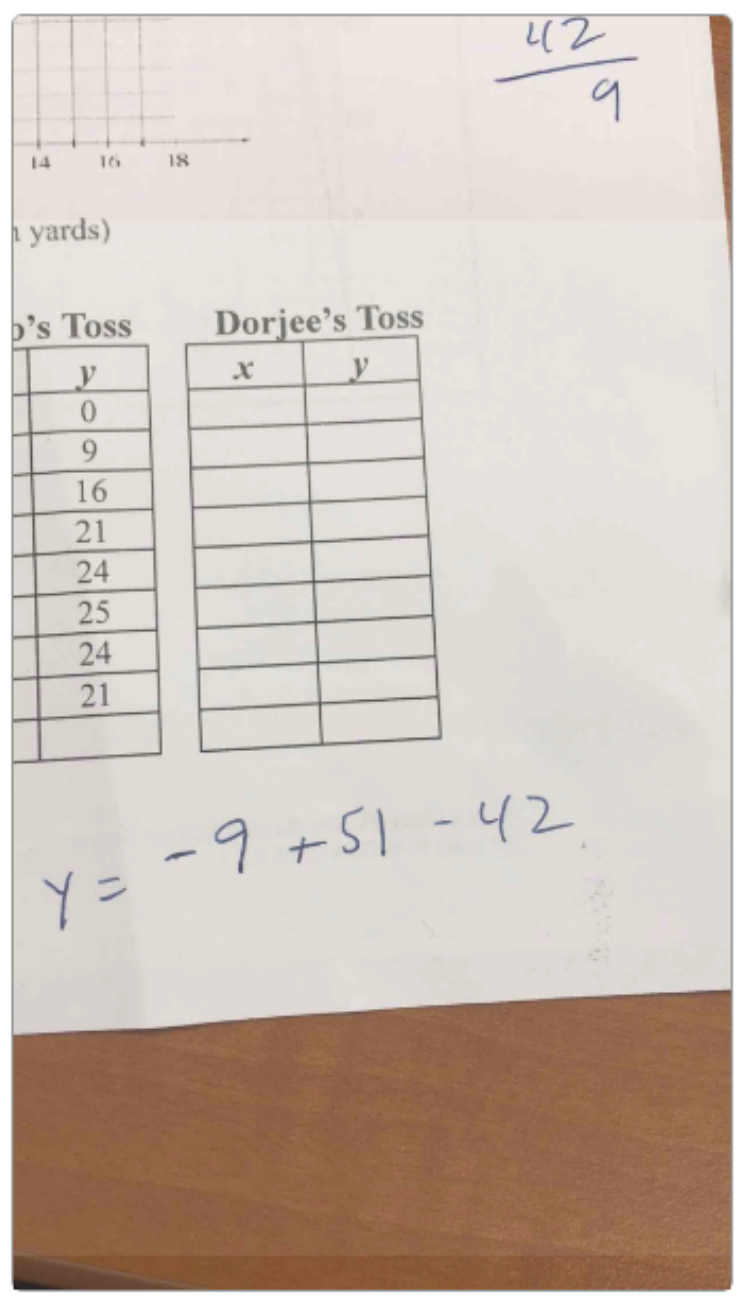
For the given equation can you try to find y value for x=3 ?

Mar 17th 11:22:39 am





Mar 17th 11:23:27 am



Mar 17th 11:23:37 am

That's Correct !

Mar 17th 11:24:05 am

But what's next?

Mar 17th 11:24:23 am

Like that plug next values of x and find the y value

Mar 17th 11:24:57 am

Do you understand that step ?

Mar 17th 11:25:15 am

You mean just assume that x = 4?

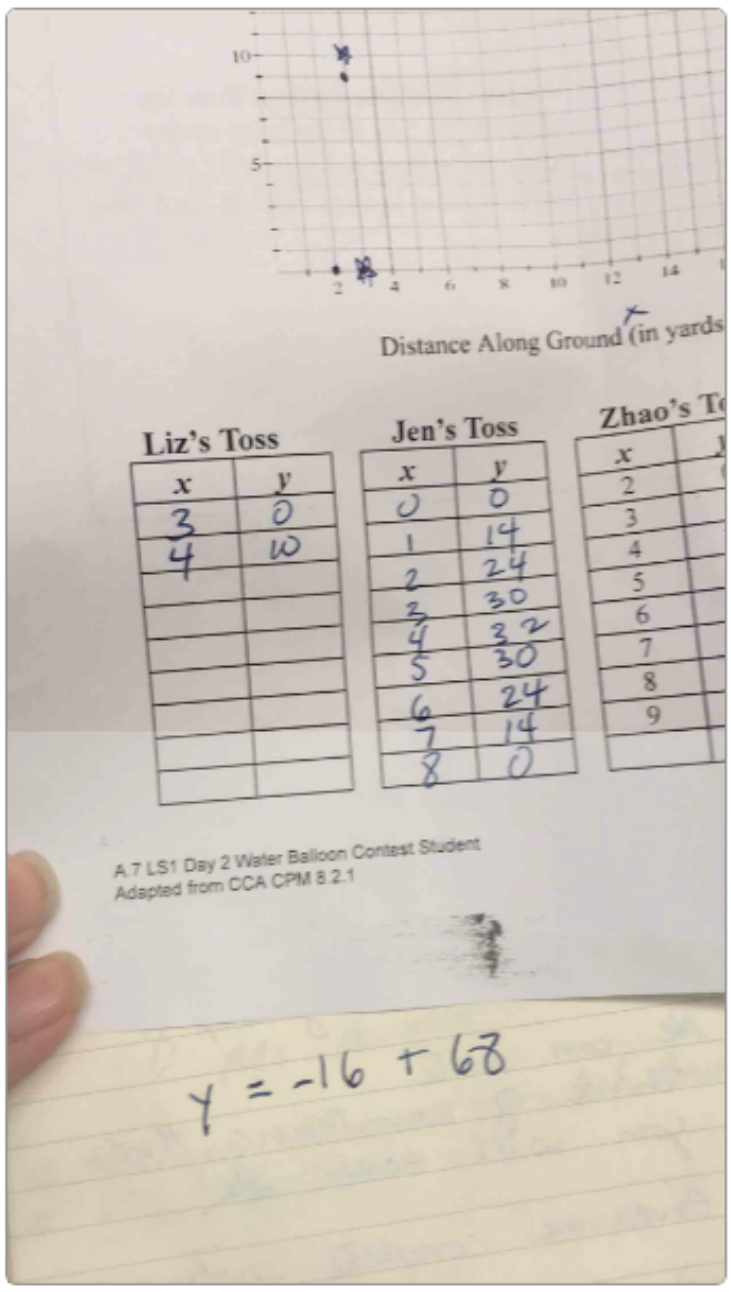
Mar 17th 11:25:39 am

Yes

Mar 17th 11:25:46 am

Can you try next step from that ?

Mar 17th 11:26:40 am



Mar 17th 11:27:59 am

I think I got it! Thank you I have to run

Mar 17th 11:28:22 am

You are welcome !

Mar 17th 11:28:30 am

Can you do the rest of problem like that ?

Mar 17th 11:28:39 am

Yes!

Mar 17th 11:28:49 am

Great !

Mar 17th 11:28:53 am

Thank you

Mar 17th 11:29:03 am

If you have any questions you can ask now

Mar 17th 11:29:06 am

You are welcome !

Mar 17th 11:29:09 am

Thank you for using Yup!

Mar 17th 11:30:00 am

Enjoy your day!

Mar 17th 11:30:10 am

Thank you again!

Mar 17th 11:30:19 am

You too sir

Mar 17th 11:30:36 am

Student ended session

Mar 17th 11:30:50 am