Apr 3rd 11:02:44 pm

Hi Xiaolin! Welcome back to Yup! :D

Apr 3rd 11:03:02 pm ✓ *Introduction: Greets student by name, welcomes them back*

What do we need to solve for in this problem?

Apr 3rd 11:03:16 pm ✓ *A1: Confirm understanding of the student's problem*

I already got to the part where it is 2y=1-x

Apr 3rd 11:03:36 pm

However I am unsure what the next step isp

Apr 3rd 11:03:44 pm

Got it! So do you need to solve for y?

Apr 3rd 11:03:58 pm ✓ *A1: Confirm understanding of the student's problem*

I need to graph the equation

Apr 3rd 11:04:21 pm

Alright!

Apr 3rd 11:04:28 pm

Well your first step was perfect, so great job with that! :D

Apr 3rd 11:04:38 pm ✓ *A1: Determine the student's progress*

So to graph this equation, we do need to solve for y, which is what you started to do, right?

Apr 3rd 11:05:31 pm ✓ *A1: Determine starting point*

Well if we're looking at the problem now:

Apr 3rd 11:05:48 pm

Apr 3rd 11:05:50 pm ✓ *C1/B2: Whiteboard image to supplement explanation*

What else is with the y that we need to move over to the other side?

Apr 3rd 11:06:03 pm ✓ *C3: Guiding question*

2

Mhm! And what do you think we would need to do to the 2 to both sides? Would we add it? Subtract? Multiply? Divide?

Apr 3rd 11:06:40 pm ✓ *B2: Guide student towards next step*

Divide

Apr 3rd 11:07:00 pm

Mhm! And if we divide both sides by 2, we want to make sure we divide everything by 2! So do you want to try doing that, or is that where you get stuck?

Apr 3rd 11:07:36 pm ✓ *B2: Tutor builds on student's thoughts*
           ✓ *C3: Invite student to proceed independently*

$$\frac{2y}{2} = \frac{1-x}{2}$$

$$y = \frac{1}{2} - 2x$$

Apr 3rd 11:08:48 pm

Is that correct

Apr 3rd 11:08:59 pm

✓ *C1: Tutor redirects student's mistake without causing stress*

Not quite! But that's very close :)

Apr 3rd 11:09:09 pm

The first part is correct, but the part with the x is not exactly right!

Apr 3rd 11:09:36 pm

So we're dividing everything by 2, right? When we say "2x", that means 2 times x

Apr 3rd 11:09:59 pm ✓ *C1: Adapt instruction to student gap*

So how would we show x divided by 2?

Apr 3rd 11:10:09 pm ✓ *C3: Guides student towards corecting their own mistake*

So -x/2

Apr 3rd 11:10:22 pm

Yeah, exactly!

Apr 3rd 11:10:27 pm

Great job! :D

Apr 3rd 11:10:52 pm ✓ *C2: Encouraging language*

So the equation would be y=1/2-x/2

Apr 3rd 11:11:01 pm

Yes!

Apr 3rd 11:11:10 pm

How would I graph it

Apr 3rd 11:11:16 pm

So to graph it, what's the two pieces of information we can get from the equation?

Apr 3rd 11:11:39 pm ✓ *C3: Expand scope of guiding questions if student is succeeding*

M and slope

Apr 3rd 11:11:56 pm

-x/2 is the slope right?

✓ *B2: Clarifies step further / C1: Adapts explanation to student's confusion error*

Apr 3rd 11:12:17 pm

Very close! The m is the slope :) But yeah, that's right!

Apr 3rd 11:12:22 pm

When we're dealing with the slope, we normally don't include the x. So what would it be?

Apr 3rd 11:12:42 pm

It's the exact same thing you got, but without the x!

Apr 3rd 11:12:57 pm

So we get rid of the x

Apr 3rd 11:13:21 pm

Or rather, we just don't include it when identifying the slope

Apr 3rd 11:13:43 pm

We don't actually have to change anything in the equation! For example, if we had: y = 2x + 5?

Apr 3rd 11:14:12 pm

The slope would be 2, not 2x!

Apr 3rd 11:14:16 pm

Ohhhh

Apr 3rd 11:14:23 pm

Does that make sense?

Apr 3rd 11:14:25 pm ✓ *C1: Check with the student to ensure understanding*

So what would it be for this problem?

Apr 3rd 11:14:43 pm ✓ *C3: Invite student input*

Ok so I do I know the y intercept of the equation

Apr 3rd 11:14:46 pm

The slope would be 1/2

Apr 3rd 11:14:51 pm

Look at it one more time :) I think you're missing something really small!

Apr 3rd 11:15:14 pm ✓ *B1/C1: Redirect student error*

Would the slope be positive or negative?

Apr 3rd 11:16:10 pm ✓ *C3: Guiding question*

Positive

Apr 3rd 11:16:18 pm

Actually negative

Apr 3rd 11:16:33 pm

Yeah, good job! It would be negative because we have the "-x/2" instead of "+x/2"

Apr 3rd 11:16:53 pm ✓ *B2: Clarifies further*

And just to clarify, what would the y-intercept be?

Apr 3rd 11:17:13 pm ✓ *C3: Invite student input*

1/2

Apr 3rd 11:17:22 pm

Yeah, exactly! :D

Apr 3rd 11:17:30 pm ✓ *C2: Encouraging language*

So now that we have the slope and the y-intercept, we can graph this problem!

Apr 3rd 11:17:59 pm ✓ *B2: Tie steps together*

Do you want to try graphing that on your own, or do you want us to do that together? :)

Apr 3rd 11:18:17 pm ✓ *C2: Use of "we" language*

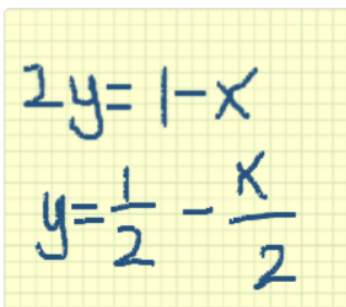So the slope is -2

Apr 3rd 11:18:40 pm

And y intercept is 1/2

Apr 3rd 11:18:48 pm

I think you got the slope mixed up

Apr 3rd 11:19:07 pm ✓ *B1/C1: Redirect student error*

Try looking at the equation again? :) You got it right before!

Apr 3rd 11:19:30 pm ✓ *C2: Acknowledge student's mistake without causing stress*

$$2y = 1 - x$$

$$y = \frac{1}{2} - \frac{x}{2}$$

Apr 3rd 11:19:55 pm ✓ *C1/B2: Whiteboard image to supplement explanation*

Ok so it is y=1/2-x/2

Apr 3rd 11:19:57 pm

Yeah! So what would the slope be?

Apr 3rd 11:20:21 pm ✓ *C3: Invite student input*

-x/2

Apr 3rd 11:20:34 pm

Okay, let's back up just a little! :)

Apr 3rd 11:21:06 pm ✓ *C2: Uses positive language to address mistake*

If there's just an x, what number is techincally in front of the x?

Apr 3rd 11:21:17 pm ✓ *C1: Adapt instruction to student gap*
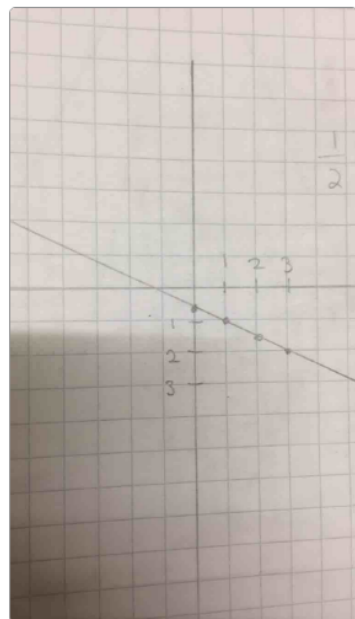
1

Apr 3rd 11:21:28 pm

Mhm!

Apr 3rd 11:21:33 pm

Apr 3rd 11:21:40 pm ✓ *C1/B2: Whiteboard image to supplement explanation*

So when we are looking for slope, we basically just pretend the x goes away! So if we get rid of the x, what are we left with?

Apr 3rd 11:22:08 pm ✓ *B2/C1: Redirect student error*

Apr 3rd 11:22:44 pm

Is this correct

Apr 3rd 11:22:48 pm

That's exactly right! Great job :)

Apr 3rd 11:23:14 pm ✓ *C2: Encouraging language*

Ok I think that clarifies eveythig

Apr 3rd 11:23:29 pm

Alright! Do you have any other questions either about this problem or any other problem?

Apr 3rd 11:23:45 pm ✓ *C1: Check with the student to ensure understanding*
              ✓ *Tutor checks to see if the student needs further help*

No thank you

Apr 3rd 11:23:56 pm

Alright, thank you for using Yup! Have a great night!

Apr 3rd 11:24:11 pm ✓ *Conclusion: Tutor thanks student for using Yup / warm send-off*

Student ended session

Apr 3rd 11:24:20 pm

Apr 3rd 11:23:14 pm ✓ *C2: Encouraging language*

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Apr 3rd 11:23:29 pm

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Apr 3rd 11:23:45 pm ✓ *C1: Check with the student to ensure understanding*
              ✓ *Tutor checks to see if the student needs further help*

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Apr 3rd 11:23:56 pm

Alright, thank you for using Yup! Have a great night!

Apr 3rd 11:24:11 pm ✓ *Conclusion: Tutor thanks student for using Yup / warm send-off*

Student ended session

Apr 3rd 11:24:20 pm