

May 30th 6:53:41 pm

TUTOR FOUND, NOW REVIEWING PROBLEM AT NO CHARGE

May 30th 6:53:43 pm

Welcome back 😊 Madison.

May 30th 6:53:44 pm

I'm finding you a tutor ASAP.

May 30th 6:53:46 pm

BTW, the tutor will spend a minute reviewing your problem so when the session begins, you can quickly jump into it!

May 30th 6:53:48 pm

👍 Okay!

May 30th 6:53:54 pm

Have you started on the problem at all?

May 30th 6:53:56 pm

📁 your work and share with your tutor. There's no such thing as sharing too little work 😊

May 30th 6:53:58 pm

SESSION STARTED AT 10:54 AM

May 30th 6:54:02 pm

Hi! My name is Ms. Jensen and I will be your tutor for this session. How are you?

May 30th 6:54:04 pm ✓ *Introduction: Builds rapport with warm greeting*

I'm good, and you?

May 30th 6:54:17 pm

I'm well, thanks!

May 30th 6:54:25 pm

Have you been able to work on this problem yet?

May 30th 6:54:34 pm ✓ *A1: Determine progress*

Only a little bit.

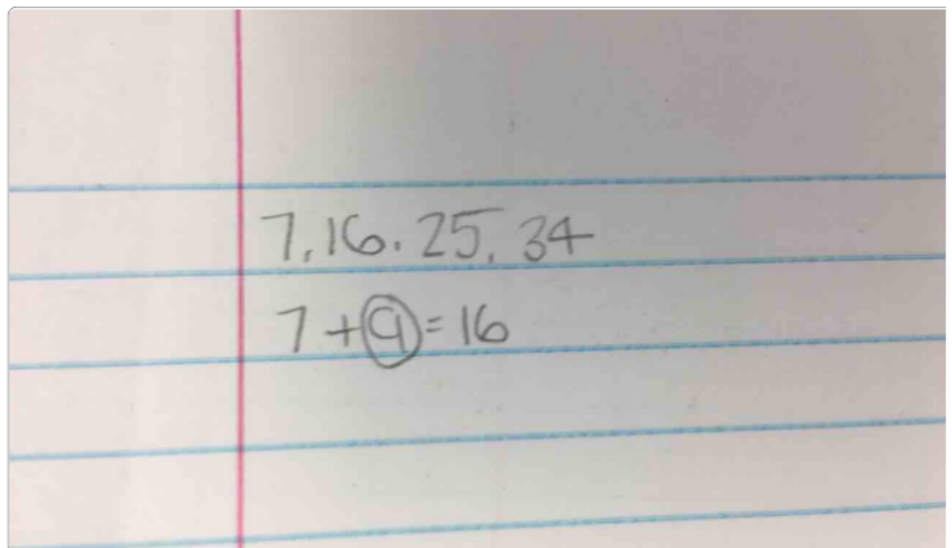
May 30th 6:54:50 pm

Okay!

May 30th 6:54:54 pm

Can you send me a picture of that or explain to me what you've been able to do?

May 30th 6:55:05 pm ✓ *A1: Determine the student's progress / starting point*



May 30th 6:55:23 pm

Great, thanks!

May 30th 6:55:30 pm

Let me take a look.

May 30th 6:55:32 pm

Awesome!

May 30th 6:55:42 pm

You've found the distance between the first two is 9.

May 30th 6:55:56 pm

Is that the same for the others as well?

May 30th 6:56:01 pm ✓ *A1: Probe student to determine level of understanding*

Yup.

May 30th 6:56:27 pm

Fantastic!

May 30th 6:56:36 pm ✓ *C2: Positive language*

That is mostly what we need to be able to make the equation for it!

May 30th 6:56:49 pm

Do you remember the form that we write these equations in?

May 30th 6:57:06 pm ✓ *A1: Gauge student's existing knowledge*

Um, no.

May 30th 6:57:21 pm

Okay!

May 30th 6:57:24 pm

I'll explain it a little and then pull it up. :)

May 30th 6:57:33 pm

Because we know the distance is happening the same every time, we know that it's going to happen a total of 69 times before we get to the 70th term.

May 30th 6:58:04 pm ✓ *C1: Adapt instruction to student gap*

Does that make sense?

May 30th 6:58:08 pm ✓ *C1: Check with the student to ensure understanding*

Not really.

May 30th 6:58:40 pm

Thanks for letting me know! :)

May 30th 6:58:49 pm

✓ **B2: Breaks down concept further / C1: Adapts to student's knowledge gap**

Each time we are adding 9, correct?

May 30th 6:59:02 pm

Yeah.

May 30th 6:59:10 pm

Great!

May 30th 6:59:15 pm

So if we are looking for the 70th term, we are going to end up adding 9 until we get to the 70th one.

May 30th 6:59:35 pm

Since we are starting at 7, this is our first term.

May 30th 6:59:51 pm

Uh huh.

May 30th 6:59:56 pm

If 7 is the first term, we need to add 9, 69 times to get to the 70th term.

May 30th 7:00:11 pm

This will take forever, which is why we have a formula being able to write the equation to make it so much faster.

May 30th 7:00:29 pm ✓ **B2: Explain rationale behind their approach**

Does that make more sense, by chance?

May 30th 7:01:09 pm ✓ **C1: Check with the student to ensure understanding**

I know I said the same thing, just differently. It's the idea of what the formula is.

May 30th 7:01:29 pm

Oh ok. That's what was confusing! I thought it started at 34 because that was the last one given, which was why I was confused that it was 69 left and not 66.

May 30th 7:01:30 pm

Oh, okay! Right!

May 30th 7:01:44 pm

If you start at the 34, there's only 66 times left, correct!

May 30th 7:02:01 pm ✓ **B2: Tutor builds on student's thoughts**

So here is the form that we can use so that we don't have to sit there and to the addition 60+ times.

May 30th 7:02:18 pm ✓ **B2: Uploads key information to supplement explanation**

$$a_n = a_1 + d(n - 1)$$

May 30th 7:02:20 pm

Does this look familiar?

May 30th 7:02:39 pm ✓ **C3: Encourages student to share existing knowledge**

All of this algebra stuff kind of looks the same! Lol. But yeah it does.

May 30th 7:03:22 pm

That's true! :) Algebra can look the same from time to time.

May 30th 7:03:40 pm ✓ **C2: Encouraging language**

I'm glad this looks familiar though!

May 30th 7:03:45 pm

✓ **B2: Breaks down concept further**

We have a few things that we need to know.

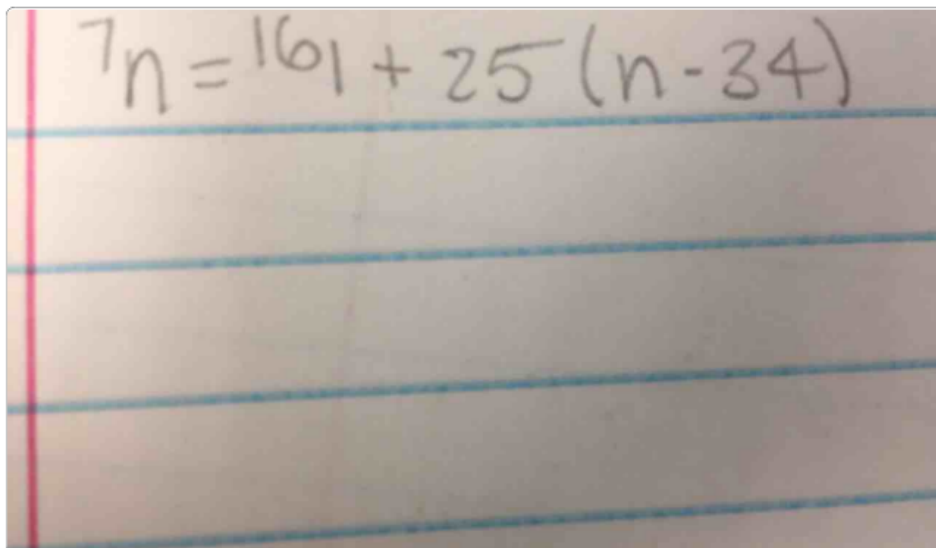
May 30th 7:03:58 pm

That is what a_1 is, d , and n .

May 30th 7:04:12 pm

What might those be?

May 30th 7:04:16 pm ✓ **C3: Invite student input**


$$7n = 161 + 25(n - 34)$$

May 30th 7:04:59 pm

Is it this?

May 30th 7:05:00 pm

That might be wrong I'm just guessing.

May 30th 7:05:11 pm

Not quite!

May 30th 7:05:14 pm ✓ **C2: Acknowledge student's mistake without causing stress**

:)

May 30th 7:05:21 pm

a_1 is the first term.

May 30th 7:05:26 pm ✓ **C1: Adapts explanation to student's confusion**

What's the first term listed in this sequence?

May 30th 7:05:34 pm ✓ **C3: Invite student input**

Correct!

May 30th 7:05:52 pm

And then d is the distance between each.

May 30th 7:05:58 pm ✓ **B2: Clarifies formula further**

You had found that earlier. What is it?

May 30th 7:06:09 pm ✓ **C3: Invite student input**

9.

May 30th 7:06:28 pm

Excellent!

May 30th 7:06:34 pm ✓ **C2: Encouraging language**

And last, n is the number term we want to find.

May 30th 7:06:46 pm ✓ **B2: Clarifies formula further**

Which term do we want?

May 30th 7:06:51 pm ✓ **C3: Guiding question**

70?

May 30th 7:06:59 pm

Perfect!

May 30th 7:07:04 pm

If we plug each of these pieces of information into the form, we can get the following:

May 30th 7:07:18 pm ✓ **B2: Uploaded images help the student visualize the problem and follow along**

$$a_n = a_1 + d(n - 1)$$

$$a_{70} = 7 + 9(70 - 1)$$



May 30th 7:07:20 pm

Do you see how that fits?

May 30th 7:07:32 pm ✓ **C1: Check with the student to ensure understanding**

Yup.

May 30th 7:08:19 pm

Awesome!

May 30th 7:08:24 pm

You're doing great!

May 30th 7:08:27 pm ✓ **C2: Reassuring language**

Now we can simplify by pieces.

May 30th 7:08:36 pm ✓ **B2: Guide student towards next step**

What would we do first?

May 30th 7:08:39 pm ✓ **C3: Open guiding question**

Would we start with what is in parenthesis?

May 30th 7:09:15 pm

You got it!

May 30th 7:09:20 pm ✓ **C2: Encouraging language**

What do we get there?

May 30th 7:09:30 pm ✓ **C3: Encourage student to take the next step**

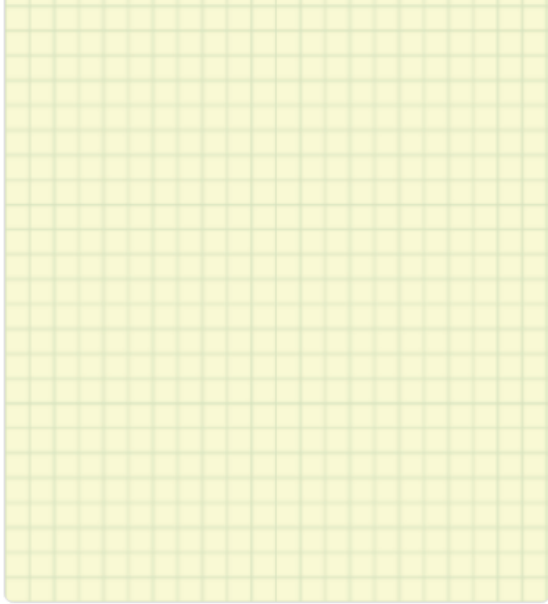
69

May 30th 7:09:49 pm

Great!

May 30th 7:09:52 pm

$$a_n = a_1 + d(n - 1)$$
$$a_{70} = 7 + 9(70 - 1)$$
$$a_{70} = 7 + 9(69)$$



May 30th 7:09:55 pm ✓ **B2: Whiteboard image to clarify step**

What's next?

May 30th 7:09:57 pm ✓ **C3: Invite student input**

7+9

May 30th 7:10:14 pm

Not quite!

May 30th 7:10:19 pm

We need to use the order of operations: PEMDAS

May 30th 7:10:32 pm ✓ **C1: Adapts explanation to student's confusion**

Which operation comes next that we have?

May 30th 7:10:57 pm ✓ **C3: Guiding question**

Exponents

May 30th 7:11:08 pm

That is next! Though we don't have any in this problem.

May 30th 7:11:19 pm ✓ **B2: Tutor builds on student's thoughts**

One thing we can do is look at what operations the problem has still.

May 30th 7:11:49 pm ✓ **B2: Clarifies step further**

Multiplication

May 30th 7:11:57 pm

Right!

May 30th 7:12:01 pm

What is 9(69)?

May 30th 7:12:10 pm ✓ **C3: Guiding question**

Great job!

May 30th 7:12:48 pm ✓ **C2: Positive language**

$$a_n = a_1 + d(n - 1)$$

$$a_{70} = 7 + 9(70 - 1)$$

$$a_{70} = 7 + 9(69)$$

$$a_{70} = 7 + 621$$

May 30th 7:12:51 pm ✓ **B2: White image to clarify step**

So then lastly, what do we do and get?

May 30th 7:12:58 pm ✓ **C3: Invite student to proceed independently**

$$7 + 621$$

May 30th 7:13:28 pm

Yup!

May 30th 7:13:32 pm

What is the 70th term going to be for this arithmetic sequence?

May 30th 7:13:50 pm ✓ **C3: Invite student input**

$$\text{Total: } 628$$

May 30th 7:13:58 pm

Excellent!

May 30th 7:14:05 pm

$$a_n = a_1 + d(n-1)$$

$$a_{70} = 7 + 9(70-1)$$

$$a_{70} = 7 + 9(69)$$

$$a_{70} = 7 + 621$$

$$a_{70} = 628$$

May 30th 7:14:06 pm ✓ *B2: Uploaded image to recap solution*

You got it!

May 30th 7:14:09 pm

Great job!

May 30th 7:14:11 pm ✓ *C2: Encouraging language*

Does how we did it all make sense?

May 30th 7:14:19 pm ✓ *C1: Check with the student to ensure understanding*

Yup!

May 30th 7:14:41 pm

Awesome!

May 30th 7:14:46 pm

You did great!

May 30th 7:15:06 pm ✓ *C2: Motivates student with encouraging language*

I hope you have a wonderful rest of your day!

May 30th 7:15:19 pm ✓ *Conclusion: Warm send off*

Note: We should always check to make sure the student doesn't need further assistance before concluding a session

Thank you!!

May 30th 7:15:19 pm

Yeah you too!

Thanks! :)

May 30th 7:15:43 pm

Student ended session

May 30th 7:15:36 pm