

Sep 26th 9:57:05 am

Thanks for signing up Beatrice 🙏. I'm finding you a tutor now.

Sep 26th 9:57:07 am

I'm here to help you prepare for your tutoring session. You can talk to me by tapping the orange button that appears at the bottom 📱

Sep 26th 9:57:09 am

TUTOR FOUND, NOW REVIEWING PROBLEM AT NO CHARGE

Sep 26th 9:57:43 am

Hey there

Sep 26th 9:57:58 am

SESSION STARTED AT 11:57 AM

Sep 26th 9:57:59 am

Hello, Beatrice!

Sep 26th 9:58:05 am

Welcome to Yup!

Sep 26th 9:58:10 am ✓ *Greets student by name and welcomes them to Yup*

Hi!

Sep 26th 9:58:14 am

This is Mr. Varma! I will be your tutor for the session.

Sep 26th 9:58:21 am ✓ *Introduces himself by last name*

How far have you gotten on this problem?

Sep 26th 9:58:33 am ✓ *A1: Determine the student's progress*

Great!

Sep 26th 9:58:33 am

Only what I have already written on the paper!

Sep 26th 9:58:47 am

Let me go through your work. Please give me a moment.

Sep 26th 9:59:02 am ✓ *A1: Checks student's work to determine starting point / gauge level of understanding*

Ok

Sep 26th 9:59:09 am

Very close! How do we write 15% as a decimal?

Sep 26th 9:59:28 am ✓ *C1: Tutor addresses student's mistake without causing stress*

Ohhhh 0.15

Sep 26th 9:59:38 am

Very good!

Sep 26th 9:59:43 am ✓ *C2: Encouraging language*

So, 15% of 20 L =?

Sep 26th 9:59:54 am ✓ **B2: Guiding question**

20 X 0.15 right??

Sep 26th 10:00:19 am

3

Sep 26th 10:00:31 am

Perfect!

Sep 26th 10:00:35 am ✓ **C2: Encouraging language**

What do you mean by x L here?

Sep 26th 10:00:40 am ✓ **C3: Ask student to justify their thought process**

Where is that?

Sep 26th 10:01:10 am

Let me show it.

Sep 26th 10:01:19 am

litres	alcohol	total
20	15	300
x	25	25x

Sep 26th 10:02:15 am ✓ **Effective use of whiteboard**

Please go through this image.

Sep 26th 10:02:22 am

What do you mean by x here?

Sep 26th 10:02:42 am ✓ **C3: Ask student to justify their thought process**

Oh because I don't know how many litres to add of 100 percent alcohol so I don't know how many liters will be in the 0.25 solution

Sep 26th 10:02:56 am

Okay. Let us walk through this problem together.

Sep 26th 10:03:11 am ✓ **C2: Use of "we" language**

Given that there is 20 L of 15% solution.

Sep 26th 10:03:30 am ✓ **B2: Guide student towards next step**

Oh it's actually 20+x

Sep 26th 10:03:37 am

Perfect!

Sep 26th 10:03:45 am ✓ **C2: Encouraging language**

6. How many liters of pure alcohol should be added to 20 L of a 15% solution to obtain a mixture that is 25% alcohol?

litres	alcohol	total
20	0.15	3
20+x	0.25	0.25x
x	1.00	x

Sep 26th 10:04:06 am

We add x L of pure alcohol to 20L of 15% solution.

Sep 26th 10:04:12 am ✓ **B2: Show rationale behind step**

Is that better

Sep 26th 10:04:14 am

Very close!

Sep 26th 10:04:38 am ✓ **C2: Encouraging language**

Oh

Sep 26th 10:04:51 am

25% of total mix = ?

Sep 26th 10:04:58 am ✓ **B2: Guiding question**

On yeah $(20+X) \cdot 0.25$

Sep 26th 10:05:25 am

Perfect!

Sep 26th 10:05:32 am ✓ **C2: Encouraging language**

What's the amount of alcohol in the mix.

Sep 26th 10:05:42 am ✓ **B2: Clarify step**

Now, we need to set up an equation.

Sep 26th 10:05:51 am

How much alcohol, do we have in 20L of 15% solution .

Sep 26th 10:06:08 am ✓ **C2: Guiding question**

?

Sep 26th 10:06:10 am

So then it's $x+3=0.25(20+X)$

Sep 26th 10:06:13 am

Great job!

Sep 26th 10:06:18 am ✓ **C2: Encouraging language**

What do you think we could try in the next step?

Sep 26th 10:06:29 am ✓ **C3: Invites student input for next step**

Brackets

Sep 26th 10:06:38 am

Yes. Please give it a try!

Sep 26th 10:06:46 am

$5+0.25x$

Sep 26th 10:06:53 am

Good job!

Sep 26th 10:07:09 am ✓ **C2: Encouraging language**

So, $x=?$

Sep 26th 10:07:11 am ✓ **B2: Guiding question**

Then $0.75x=2$

Sep 26th 10:07:34 am

Good!

Sep 26th 10:07:40 am ✓ **C2: Encouraging language**

Would you like to take a shot at the final answer?

Sep 26th 10:07:52 am ✓ **C3: Invite student to proceed independently**

2.67?

Sep 26th 10:08:03 am

L

Sep 26th 10:08:06 am

Or $8/3L$

Sep 26th 10:08:19 am

Great job!

Sep 26th 10:08:28 am

That's the correct answer. Keep up good work!

Sep 26th 10:08:37 am ✓ **C2: Encouraging language**

(Note: A more correct way to say this is "Keep up the good work!")

11/1

Do you have any questions about what we have done?

Sep 26th 10:08:51 am ✓ **C1: Check with the student to ensure understanding**

No thanks it's much clearer I just didn't know what to do after the table but I got it now, thanks

Sep 26th 10:09:23 am

You are always welcome!

Sep 26th 10:09:36 am

Do you have any other questions to get help with?

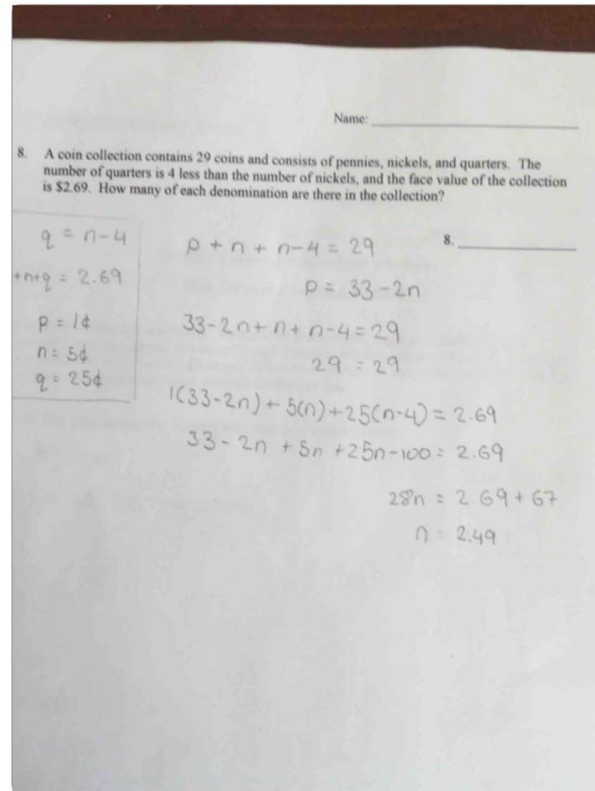
Sep 26th 10:09:44 am ✓ **Tutor checks to see if student needs more help**

Yes I do have one other one I will take a picture

Sep 26th 10:10:05 am

Sure. Please upload your next question.

Sep 26th 10:10:15 am



Sep 26th 10:10:30 am

Please give me a moment to go through your question.

Sep 26th 10:10:40 am ✓ **B1: Ensure that you understand problem**

It seems you have already tried solving this problem.

Sep 26th 10:11:17 am

problem*

Sep 26th 10:11:20 am

Right?

Sep 26th 10:11:21 am

Yes

Sep 26th 10:11:24 am

Let me check your work. Meanwhile, please explain what you did in solving this.

Sep 26th 10:11:46 am ✓ **A1: Determine the student's progress / starting point**

How did you get $p = 33 - 2n$?

Sep 26th 10:12:31 am ✓ **C3: Ask student to justify their thought process**

I put j the the number of quarters is n-4 and then did that equal to 29 and then solved for p so that all was in terms of n

Sep 26th 10:12:43 am

Yes

Sep 26th 10:12:49 am

Very good!

Sep 26th 10:13:09 am ✓ **C2: Encouraging language**

Now, let us look at the next step.

Sep 26th 10:13:14 am

How did you get the second equation. Please check it once again.

Sep 26th 10:13:53 am ✓ **C3: Ask student to justify their thought process**

How did you get the second equation?*

Sep 26th 10:14:04 am

I then multiplied the amount in terms of n by the value of each coin

Sep 26th 10:14:24 am

Yes. You have taken the values on the left hand side in terms of pennies.

Sep 26th 10:14:47 am

Right?

Sep 26th 10:14:49 am

Yep

Sep 26th 10:15:16 am

Good!

Sep 26th 10:15:28 am ✓ **C2: Encouraging language**

But you have written 2.69 on the right hand side.

Sep 26th 10:15:44 am

Yes which is the face value of all the coins

Sep 26th 10:16:00 am

But it is in dollars.

Sep 26th 10:16:08 am

On the right hand side, the amount is in dollars and on the left hand side, the amount is in cents.

Sep 26th 10:16:31 am

So I multiplied the value of each individual coming by the number of the, in terms of n and added them to equal the face value

Sep 26th 10:16:47 am

OOOOHHHHH

Sep 26th 10:16:56 am

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

We need to write both sides either in cents or in dollars. Let's write in cents.

Sep 26th 10:17:16 am

How many cents are there in \$2.69?

Sep 26th 10:17:30 am ✓ **C2: Guiding question**

Oh haha I just wrote it all in dollars

Sep 26th 10:17:54 am

Yes. We have to write it in cents and then to solve for n.

Sep 26th 10:18:08 am ✓ **B2: Structure steps**

Once we get the value of n, we find the number of nickels and quarters.

Sep 26th 10:18:32 am ✓ **B2: Structure steps**

Okay?

Sep 26th 10:18:42 am

Would you like to rewrite the equation now?

Sep 26th 10:19:09 am ✓ **C2: Invite student to take next step**

269 cents

Sep 26th 10:19:11 am

Perfect!

Sep 26th 10:19:16 am ✓ **C2: Encouraging language**

Now, please rewrite the equation and solve for n.

Sep 26th 10:19:27 am ✓ **C2: Invite student to take next step**

Please give it a try! I will be right here to help you further.

Sep 26th 10:19:41 am ✓ **C2: Reassure student that they are not alone**

Ok one sec

Sep 26th 10:20:05 am

Sure!

Sep 26th 10:20:18 am

N=12

Sep 26th 10:21:03 am

Good! Let me check your answer.

Sep 26th 10:21:17 am

Perfect!

Sep 26th 10:21:34 am ✓ **C2: Encouraging language**

So, the number of nickels is 12.

Sep 26th 10:21:43 am

Q=8

Sep 26th 10:22:03 am

Perfect!

Sep 26th 10:22:08 am ✓ **C2: Encouraging language**

$Q=n-4=8$.

Sep 26th 10:22:12 am

9

Sep 26th 10:22:34 am

And, number of pennies = ?

Sep 26th 10:22:34 am ✓ **C2: Guiding question**

9

Sep 26th 10:22:42 am

Great job!

Sep 26th 10:22:47 am ✓ **C2: Encouraging language**

And it all adds to 29!!

Sep 26th 10:22:58 am

Perfetc

Sep 26th 10:23:02 am

Heads up! You solved the problem with very little help!

Sep 26th 10:23:01 am ✓ **C2: Encouraging words**

Keep up good work!

Sep 26th 10:23:05 am

Thanks!!!

Sep 26th 10:23:13 am

You are always welcome! Do you have any other questions to get help with?

Sep 26th 10:23:23 am ✓ **Tutor checks to see if student needs more help**

No thanks that's great!!

Sep 26th 10:23:45 am

Thanks for using Yup!

Sep 26th 10:23:52 am ✓ **Tutor thanks student for choosing Yup**

:)

Sep 26th 10:24:00 am

Have a great time, Beatrice!

Sep 26th 10:24:00 am ✓ **C2: Warm send-off**

Bye :)

Sep 26th 10:24:04 am

You too bye!

Sep 26th 10:24:12 am

:)

Sep 26th 10:24:15 am

Student ended session

Sep 26th 10:24:17 am