

$$6 + \frac{1}{3}(x-9) = \frac{1}{2}(2-x)$$

Oct 14th 4:06:29 am

TUTOR FOUND, NOW REVIEWING PROBLEM AT NO CHARGE

Oct 14th 4:06:29 am

Hi Tammy, welcome to Yup 😊. I'm finding you a tutor now.

Oct 14th 4:06:31 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 🗣️

Oct 14th 4:06:33 am

Hey there

Oct 14th 4:06:41 am

The tutor will spend a minute reviewing your problem so when the session begins, you can start solving right away!

Oct 14th 4:06:44 am

Tutors care just as much about learning as finding the answer so be sure to participate, and ask questions if you aren't following along ✓

Oct 14th 4:06:46 am

SESSION STARTED AT 8:06 PM

Oct 14th 4:06:47 am

Hi Tammy!

Oct 14th 4:06:59 am ✓ *Greets student by name*

Hello

Oct 14th 4:07:09 am

I'm Ms.Vavilakolanu and I'll be helping you out in solving this equation.

Oct 14th 4:07:11 am ✓ *Introduces herself by last name*

Have you done any work on this problem so far?

Oct 14th 4:07:32 am ✓ *A1: Determine progress*

That would be great. I'm new to this so...

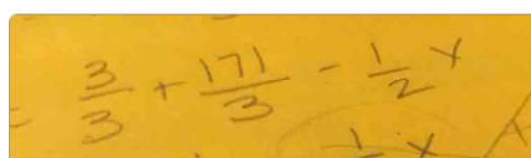
Oct 14th 4:07:38 am

Yes

Oct 14th 4:07:41 am

Please share your work

Oct 14th 4:07:54 am



$$\frac{3}{3} + \frac{17}{3} - \frac{1}{2}x$$

$$\begin{aligned}
 8 \quad & 6 + \frac{1}{3}(x-9) = \frac{1}{2}(2-x) \\
 & \frac{18}{3} + \frac{1}{3}(x-9) = \frac{2}{2} - \frac{1}{2}x \\
 & \frac{19}{3}(x-9) = \frac{2}{2} - \frac{1}{2}x \\
 & \frac{19}{3}x - \frac{171}{3} = \frac{2}{2} - \frac{1}{2}x \\
 & \frac{19}{3}x - 121 = 1 - \frac{1}{2}x \\
 & \frac{19}{3}x = \frac{2}{2} + \frac{121}{3} - \frac{1}{2}x \\
 & \frac{19}{3}x = \frac{124}{3} - \frac{1}{2}x \\
 & \frac{41}{6}x = \frac{124}{3} \\
 & x = \frac{124 \cdot 2}{3 \cdot 41} = \frac{248}{123} = \frac{348}{41} \\
 & x = \frac{348}{41}
 \end{aligned}$$

Oct 14th 4:08:25 am

Please give me a minute to go through your work.

Oct 14th 4:08:48 am

Good effort!

Oct 14th 4:09:18 am ✓ C2: Encouraging language

Not quite though!

Oct 14th 4:09:24 am ✓ C2: Acknowledge student's mistake without causing stress

Let me guide you with few concepts, so that you can identify where you went wrong.

Oct 14th 4:09:50 am ✓ C1: Adapts instruction to student gap

Are you familiar with the order of operations?

Oct 14th 4:09:59 am ✓ A1: Probe student to determine level of understanding

Yes. PEMDAS right?

Oct 14th 4:10:14 am

Yes. Perfect!

Oct 14th 4:10:24 am ✓ C2: Encouraging language

Let us apply that order in this problem too.

Oct 14th 4:10:35 am ✓ B2: Explain approach up front as a roadmap

In your second step, what would you do if you have use PEMDAS?

Oct 14th 4:10:56 am ✓ C1: Tutor redirects student's mistake without causing stress

Multiply the x-9 by 1/3

Oct 14th 4:11:53 am

Awesome!

Oct 14th 4:12:06 am ✓ C2: Encouraging language

That is perfect!

Oct 14th 4:12:17 am

Can you please redo that part for me?

Oct 14th 4:12:26 am ✓ C3: Invite student to proceed independently

$$\begin{aligned}
 & 6 + \frac{1}{3}(x-9) = \frac{1}{2}(2-x) \\
 & 6 + \frac{1}{3}x - \frac{9}{3} = 1 - x
 \end{aligned}$$

Oct 14th 4:12:51 am

Almost correct! Good work!

Oct 14th 4:13:00 am

Oct 14th 4:13:22 am

Check on the term on the right side of the equation.

Oct 14th 4:13:36 am

Can you find the error there?

Oct 14th 4:13:47 am

✓ C2: Acknowledge student's mistake without causing stress

Yes. It's 1/2x

Oct 14th 4:14:06 am

Perfect!

Oct 14th 4:14:12 am ✓ C2: Encouraging language

Would you like to continue the work from here and share it?

Oct 14th 4:14:33 am ✓ C3: Invite student to proceed independently

Ok

Oct 14th 4:14:43 am

I am right here to guide you if you are stuck at any step.

Oct 14th 4:15:06 am ✓ C2: Reassure student that they are not alone

$$6 + \frac{1}{3}(x-9) = \frac{1}{2}(2-x)$$

$$6 + \frac{1}{3}x - \frac{9}{3} = 1 - \frac{1}{2}x$$

$$\frac{18}{3} - \frac{9}{3} + \frac{1}{3}x = 1 - \frac{1}{2}x$$

$$\frac{9}{3} + \frac{1}{3}x = 1 - \frac{1}{2}x$$

Oct 14th 4:15:43 am

Is this right so far?

Oct 14th 4:15:59 am

Absolutely right!

Oct 14th 4:16:16 am ✓ C2: Encouraging language

Good going!

Oct 14th 4:16:20 am

$$\frac{9}{3} + \frac{1}{3}x = 1 - \frac{1}{2}x$$

$$-\frac{1}{3} + \frac{1}{3}x = \frac{3}{3} - \frac{9}{3} - \frac{1}{2}x$$

$$\frac{1}{3}x = -\frac{6}{3} - \frac{1}{2}x$$

Oct 14th 4:17:49 am

I hope this is right.

Oct 14th 4:18:11 am

Perfect!

Oct 14th 4:18:45 am ✓ C2: Encouraging language

You are just few steps away from the answer. Are you able to find x?

Oct 14th 4:21:38 am ✓ C2: Encourage student by telling them how close to the solution they are / B2: Guiding question

Almost. This is where I'm at.

Oct 14th 4:21:55 am

$$\frac{1}{3}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$

$$\left(\frac{2}{3}\right)\frac{1}{2}x + \frac{1}{3}x = -\frac{1}{2}x$$

$$\frac{3}{6}x + \frac{2}{6}x = -\frac{1}{2}x$$

$$\frac{5}{6}x = -\frac{1}{2}x$$

Oct 14th 4:22:03 am

Not quite!

Oct 14th 4:22:55 am ✓ **C2: Acknowledge student's mistake without causing stress**

I just realized I forgot something.

Oct 14th 4:23:01 am

Let us look at these steps together.

Oct 14th 4:23:01 am ✓ **C2: Use of "we" language**

:)

Oct 14th 4:23:04 am

$$\frac{1}{3}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$

$$\left(\frac{2}{3}\right)\frac{1}{2}x + \frac{1}{3}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$

$$\frac{3}{6}x + \frac{2}{6}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$

$$\frac{5}{6}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$

Oct 14th 4:23:12 am

Just a small deviation.

Oct 14th 4:24:06 am

What happens on the right side of the equation, when you added $\frac{1}{2}x$?

Oct 14th 4:24:37 am ✓ **C1: Adapts to student's knowledge gap with guiding question**

Oh ok.

Oct 14th 4:25:52 am

Did you find the error?

Oct 14th 4:26:41 am ✓ **(Encourages student to identify their error independently)**

$$\frac{1}{3}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$

$$\left(\frac{2}{3}\right)\frac{1}{2}x + \frac{1}{3}x = -\frac{6}{3}$$

$$\frac{3}{6}x + \frac{2}{6}x = -\frac{6}{3}$$
~~$$\frac{5}{6}x = -\frac{6}{3} - \frac{1}{2}x + \frac{1}{2}x$$~~

$$x = -\frac{36}{15}$$

Oct 14th 4:26:44 am

Very good!

Oct 14th 4:27:11 am ✓ **C2: Encouraging language**

Can we simplify $-36/15$?

Oct 14th 4:27:24 am

✓ **B2: Guiding question**

To the smallest fraction?

Oct 14th 4:27:43 am

Yes. It's 2 2/5

Oct 14th 4:27:47 am

Please do not forget the sign.

Oct 14th 4:28:12 am ✓ **C2: Acknowledge student's mistake without causing stress**

Darn! It's the little things things that get me.

Oct 14th 4:28:52 am

Yay! I'm so happy that I got it right.

Oct 14th 4:29:13 am

That is ok. You are still learning. The more you practice, you will be perfect in these too.

Oct 14th 4:29:22 am ✓ **C2: Encouraging language**

I am glad too that you could identify your mistakes and could correct it.

Oct 14th 4:29:44 am

So, what did we do here to solve for x?

Oct 14th 4:30:06 am ✓ **B2: Solution recap**

We used the order of operations and then balanced the equation.

Oct 14th 4:31:51 am

Perfect!

Oct 14th 4:32:00 am ✓ **C2: Encouraging language**

We used the order of operations to group the like terms and make x all by itself.

Oct 14th 4:32:24 am ✓ **B2: Solution recap**

Good job, Tammy!

Oct 14th 4:32:33 am ✓ **C2: Encouraging language**

Do you have any other questions to work on?

Oct 14th 4:32:42 am ✓ **(Tutor checks to see if student needs more help)**

Thank you so much for all your help. No, no other questions right now.

Oct 14th 4:33:07 am

Would you please solve $3x - \frac{1}{2}(x+4) = \frac{2}{3}(x+5)$

Oct 14th 4:33:58 am ✓ **Tutor provides CFU to ensure the student's gap has been fully bridged**

This might give you a grip on the concepts you learned in this session.

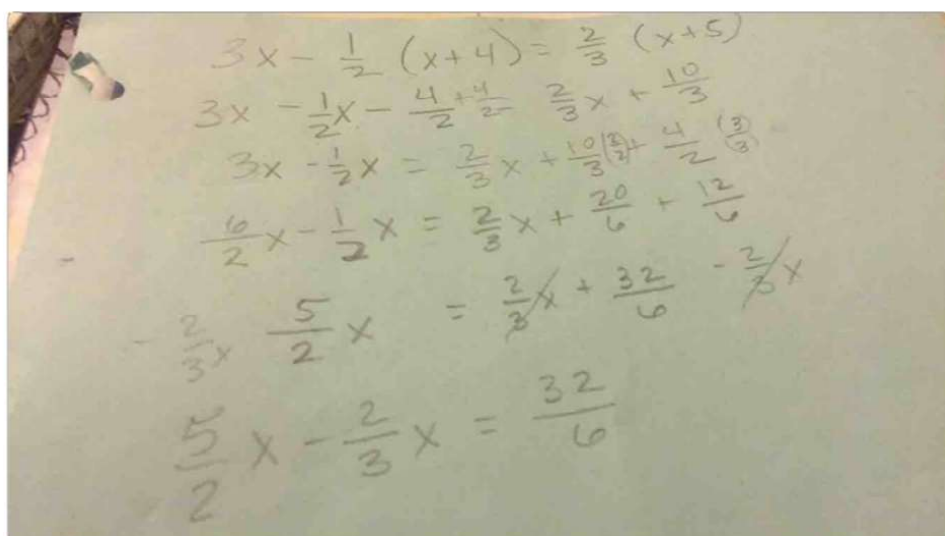
Oct 14th 4:34:57 am

Ok

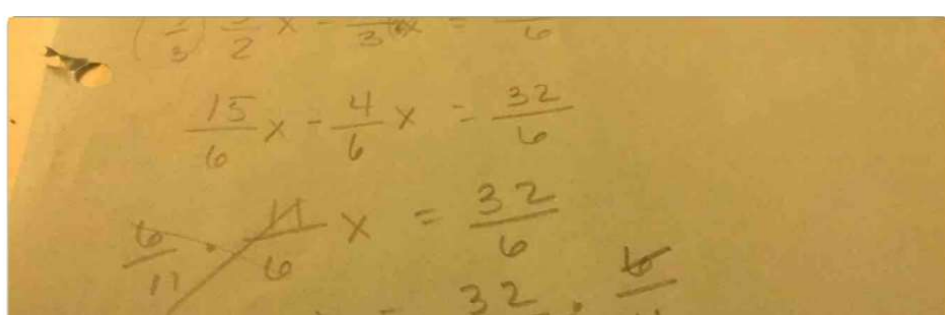
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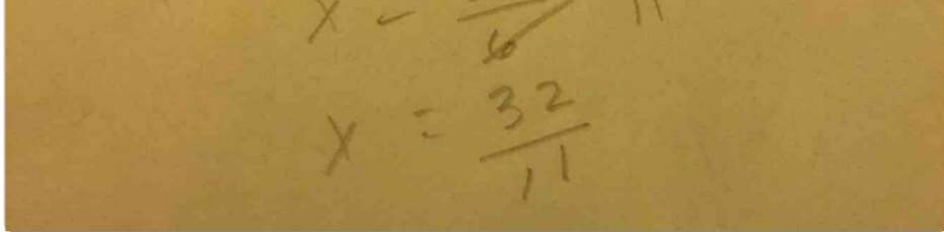
How is it going?

Oct 14th 4:37:15 am ✓ **Tutor checks-in with student after a couple minutes have passed**



Oct 14th 4:37:36 am





Oct 14th 4:38:55 am

Awesome work!

Oct 14th 4:39:47 am ✓ *C2: Encouraging language*

Are you aware of verifying if your answer is correct?

Oct 14th 4:40:10 am ✓ *(Encourages student to check their answer)*

No. is there an easier way then plugging my answer in for each x in the original problem?

Oct 14th 4:41:15 am

:)

Oct 14th 4:41:32 am

That is the only way to verify if the value of x is right or not!

Oct 14th 4:41:54 am

I had a feeling you were going to say that.

Oct 14th 4:42:20 am

:)

Oct 14th 4:42:28 am

Good job, Tammy!

Oct 14th 4:42:34 am

You were perfect in working out on this problem.

Oct 14th 4:42:44 am

I am glad you have a good hold on these kind of problems now.

Oct 14th 4:42:57 am

It was a pleasure to guide you in this session.

Oct 14th 4:43:08 am

Would you like to work on anything else before we end the session?

Oct 14th 4:43:22 am ✓ *Tutor checks to make sure student doesn't need further help*

Thank you very much! No, I'm good. Thanks again.

Oct 14th 4:43:43 am

You are welcome.

Oct 14th 4:43:49 am

Thank you for using Yup!

Oct 14th 4:43:56 am ✓ *Tutor thanks student for using Yup*

Please come back to work more with us.

Oct 14th 4:44:08 am

Have a nice time ahead.

Oct 14th 4:44:14 am

Take care. Bye.

Oct 14th 4:44:18 am

✓ *C2: Warm send-off*

I'm sure I will need more help soon..) take care. Bye.

Oct 14th 4:44:39 am

Student ended session

Oct 14th 4:44:52 am