$$\frac{24w + 54}{4} = -11$$

Oct 9th 3:29:24 pm

Welcome back 😬 Meg.

Oct 9th 3:29:26 pm

I'm finding you a tutor ASAP.

Oct 9th 3:29:29 pm

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

Oct 9th 3:29:31 pm

Got it!

Oct 9th 3:29:36 pm

Did you start on the problem?

Oct 9th 3:29:38 pm

TUTOR FOUND, NOW REVIEWING PROBLEM AT NO CHARGE

Oct 9th 3:29:39 pm

📷 your work so I can send it to the tutor. Sending even the tiniest bit of progress will help you reach a solution faster 👈

Oct 9th 3:29:41 pm

SESSION STARTED AT 3:29 PM

Oct 9th 3:29:58 pm

Hi Meg! I'm Mr. Kamireddy and I'll be your tutor for this session.

Oct 9th 3:30:06 pm ✓ *(Greets student by name and introduces himself by last name)*

Can you tell me how far you have gotten on this problem?

Oct 9th 3:30:17 pm ✓ *A1: Determine the student's progress*

Hello, pleased to meet tou

Oct 9th 3:30:19 pm

I have expanded the brackets and have achieved this result however I do not know how to continue

Oct 9th 3:30:44 pm

No worries, we'll tackle it together.

Oct 9th 3:31:01 pm ✓ *C2: Reassure student that they are not alone*

What was your original problem?

Oct 9th 3:31:23 pm

$$\frac{6(4w + 9)}{4} = -11 \quad w = \underline{}$$

Oct 9th 3:31:49 pm

Thank you for sharing it!

Oct 9th 3:32:08 pm

I have to put my answer as a fraction

Oct 9th 3:32:09 pm

Sure!

Oct 9th 3:32:13 pm

Have you tried similar problems earlier?

Oct 9th 3:32:32 pm ✓ *A1: Probe student to determine level of understanding*

No, this is the first question formed this way

Oct 9th 3:32:53 pm

No problem! Here our main aim is to get "w" by itself.

Oct 9th 3:33:16 pm ✓ *B2: Explain approach upfront*

(Note: Asking the student if they know the objective of the problem here would be a great way to probe their understanding)

Yes

Oct 9th 3:33:25 pm

So, first we try to get rid of the fraction part.

Oct 9th 3:33:39 pm ✓ *B2: Explain approach upfront*

What should we do to get rid of 4 from the denominator on the left side?

Oct 9th 3:33:53 pm ✓ *C3: Invite student input*

Cancel it out?

Oct 9th 3:34:14 pm

Is it possible to cancel it our directly?

Oct 9th 3:34:45 pm ✓ *B2: Guiding question*

I'm not sure

Oct 9th 3:35:08 pm

What is the sign that separates (24w+56) and 4?

Oct 9th 3:35:27 pm ✓ *B2: Guiding question*

Sorry, 54*

Oct 9th 3:35:45 pm ✓ *A1: Correct yourself immediately if you make a mistake*

Divide sign

Oct 9th 3:35:59 pm

Good! What is the opposite of division?

Oct 9th 3:36:14 pm ✓ *B2: Guiding question*

Multiplication

Oct 9th 3:36:23 pm

Perfect!

Oct 9th 3:36:29 pm ✓ *C2: Encouraging language*

So, we perform opposite operation to get rid of 4 from the denominator.

Oct 9th 3:36:49 pm ✓ *B2: Explain rationale behind step*

What do we get when we multiply with 4 on both sides?

Oct 9th 3:37:08 pm ✓ *B2: Guiding question*

(Note: Correct way to say this is "multiply by 4 on both sides")

-44

Oct 9th 3:37:24 pm

And

Oct 9th 3:37:31 pm

Good! And on the left side?

Oct 9th 3:37:48 pm ✓ *B2: Guiding question*

96w + 216

Not quite, good try though!

Oct 9th 3:38:09 pm ✓ *C1: Tutor addresses student's mistake without causing stress*
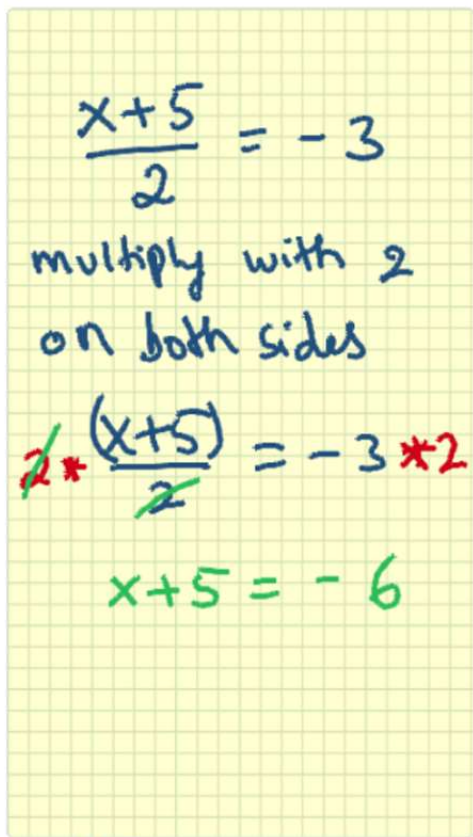
Let me share an example. Is that fine with you?

Oct 9th 3:38:27 pm

Yes, that's fine

Oct 9th 3:38:37 pm

Thank you!

Oct 9th 3:39:06 pm

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

multiply with 2
on both sides

$$2 * \frac{(x+5)}{2} = -3 * 2$$

$$x + 5 = -6$$

Oct 9th 3:39:37 pm ✓ *B2: Present a similar example to demonstrate concept / C1: Adapt to student's need's*

Do you see the image shared?

Oct 9th 3:39:47 pm

Yes I do

Oct 9th 3:40:27 pm

The reason we are multiplying with 2 is to get rid of the fraction part.

Oct 9th 3:40:32 pm ✓ *B2: Explain rationale behind step*

I think I know the answer now

Oct 9th 3:40:33 pm

Good! Go ahead.

Oct 9th 3:40:40 pm ✓ *C3: Invite student to proceed independently*

24w + 54 = -44

Oct 9th 3:41:00 pm

Awesome!

Oct 9th 3:41:07 pm ✓ *C2: Encouraging language*

What would be the next step?

Oct 9th 3:41:15 pm ✓ *C3: Invites student input for next step*

To -54 onto the right side

Oct 9th 3:41:33 pm

Perfect! Go ahead.

Oct 9th 3:41:42 pm ✓ *C3: Invite student to proceed independently*

Which would be
24w = -98

Oct 9th 3:41:55 pm

Good job!

Oct 9th 3:42:06 pm ✓ *C2: Encouraging language*

And the next step would be?

Oct 9th 3:42:13 pm ✓ *C3: Invites student input for next step*

W = 98/24

Oct 9th 3:42:17 pm

As a fraction

Oct 9th 3:42:23 pm

Positive or negative?

Oct 9th 3:42:29 pm ✓ *B2: Guiding question*

W = -98/24

Oct 9th 3:42:53 pm

Good! Can that be simplified further?

Oct 9th 3:43:03 pm ✓ *B2: Guiding question*

-49/12

Oct 9th 3:43:29 pm

Awesome!

Oct 9th 3:43:33 pm ✓ *C2: Encouraging language*

So, the value of w=-49/12.

Oct 9th 3:43:46 pm

Do you have any doubt in this problem?

Oct 9th 3:43:55 pm ✓ *C1: Check with the student to ensure understanding*

(Note: A clearer way to word this question would be -
"Does anything still confuse you about this problem?" or "Are you unsure about anything we just did?")

Yes

Oct 9th 3:43:59 pm

I meant no

Oct 9th 3:44:03 pm

Great to hear!

Oct 9th 3:44:10 pm

Are there any more questions you need help with?

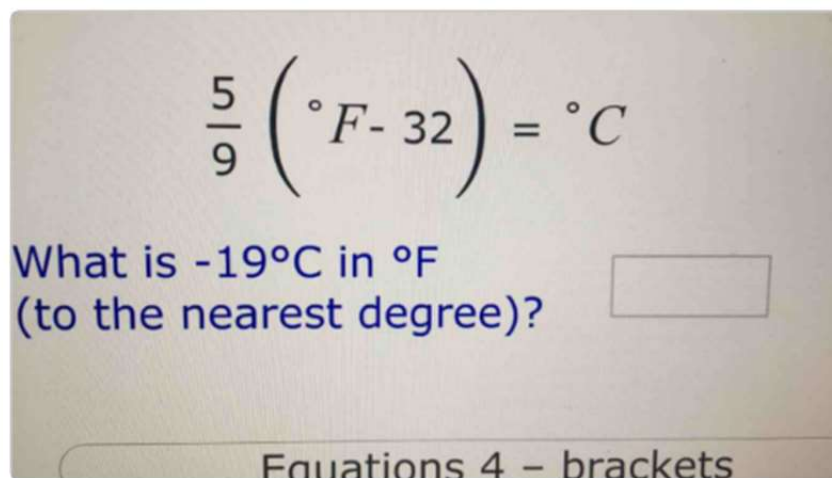Oct 9th 3:44:21 pm ✓ *Tutor checks to see if student needs more help*

Yes, Ido

Oct 9th 3:44:48 pm

* I do

Oct 9th 3:44:54 pm

Please share your next problem.

Oct 9th 3:45:01 pm

$$\frac{5}{9}\left(°F - 32\right) = °C$$

What is -19°C in °F
(to the nearest degree)?

Equations 4 – brackets

Oct 9th 3:45:07 pm

I have never understood how to do this

Oct 9th 3:45:18 pm

No worries, we'll tackle it together.

Oct 9th 3:45:38 pm ✓ *C2: Reassure student that they are not alone*
(Note: Avoid using the same message/phrasing more than once in a session-- it could come off as robotic sounding)

To start off, can you identify what we are given in the problem?

Oct 9th 3:45:59 pm ✓ *A1: Probe student to determine level of understanding*

The formula, and what we have to substitute?

Oct 9th 3:46:28 pm

Yes, exactly!

Oct 9th 3:46:37 pm ✓ *C2: Encouraging language*

Are we given with the value of F or C?

Oct 9th 3:46:51 pm ✓ *A1: Probe student to determine level of underestanding*

The value of c

Oct 9th 3:47:23 pm

°C

Oct 9th 3:47:28 pm

Perfect!

Oct 9th 3:47:30 pm ✓ *C2: Encouraging language*

We substitute c=-19 in the formula and solve for F.

Oct 9th 3:47:49 pm ✓ *B2: Explain approach upfront*
(Note: Asking the student for their input for the first step before explaining would be best here)

Can you give it a shot?

Oct 9th 3:47:57 pm ✓ *C3: Invite student to proceed independently*

$5/9(F -32) = -19$

Oct 9th 3:48:52 pm

Good job! Any guess on the next step?

Oct 9th 3:49:07 pm ✓ *C3: Invites student input for next step*

Not really

Oct 9th 3:49:40 pm

Let's work on this together.

Oct 9th 3:49:51 pm ✓ *C2: Use of "we" language*

Here our main aim is to get "F" by itself.

Oct 9th 3:50:06 pm ✓ *B2: Explain approach upfront*

Yes

Oct 9th 3:50:27 pm

First we get rid of 5/9 on the left side so that we can isolate F-32.

Oct 9th 3:50:59 pm ✓ *B2: Structure steps*

What should we do to get rid of 5/9?

Oct 9th 3:51:08 pm ✓ *B2: Guiding question*

Do 5/9 and minus it from -19

Oct 9th 3:51:58 pm

Not quite, good try though!

Oct 9th 3:52:16 pm ✓ *C2: Acknowledge student's mistake without causing stress*

We multiply with the reciprocal of 5/9 on both sides to isolate f-32.

Oct 9th 3:52:51 pm ✓ *C1: Adapt explanation to student's gap*

What is the reciprocal of 5/9?

Oct 9th 3:53:01 pm ✓ *B2: Guiding question*

I do not know what a reciprocal is

Oct 9th 3:53:18 pm

For example, reciprocal of a/b is b/a.

Oct 9th 3:53:39 pm ✓ *C1: Adapt explanation to student's gap*

When we multiply both of them, we get 1.

Oct 9th 3:53:51 pm ✓ *B2: Explain rationale behind step*

Does this make sense?

Oct 9th 3:53:56 pm ✓ *C1: Check with the student to ensure understanding*

Not really

Oct 9th 3:54:17 pm

For example, if the fraction is 2/3, then it's reciprocal is 3/2.

Oct 9th 3:54:38 pm ✓ *C1: Adapt explanation to student's gap*

Ok

Oct 9th 3:54:48 pm

Does this make sense now?

Oct 9th 3:54:48 pm ✓ *C1: Check with the student to ensure understanding*

Yes, a bit more

Oct 9th 3:55:02 pm

Oct 9th 3:55:39 pm ✓ *B2: Present a similar example to demonstrate concept / C1: Adapt to student's need's*

Do you see the image shared?

Oct 9th 3:55:51 pm

Yes

Oct 9th 3:56:11 pm

I understand now

Oct 9th 3:56:25 pm

Great to hear! Can you try our problem now?

Oct 9th 3:56:39 pm ✓ *C3: Invite student to proceed independently*

Oct 9th 3:58:24 pm

Great job!

Oct 9th 3:58:49 pm ✓ *C2: Encouraging language*

We have F-32=-171/5.

Oct 9th 3:59:05 pm

What would be the next step?

Oct 9th 3:59:13 pm ✓ *C3: Invites student input for next step*

Work out what -171 divided by 5 is

Oct 9th 3:59:48 pm

Okay! What is the value of 171 divided by 5?

Oct 9th 4:00:36 pm ✓ *B2: Guiding question*

-34.2

Oct 9th 4:01:38 pm

Very good!

Oct 9th 4:01:54 pm ✓ *C2: Encouraging language*

F-32=-34.2

Oct 9th 4:01:59 pm

What would be the next step?

Oct 9th 4:02:04 pm ✓ *C3: Invites student input for next step*

Add 32 to right side

Oct 9th 4:02:34 pm

Awesome!

Oct 9th 4:02:44 pm ✓ *C2: Encouraging language*

F = 66.2

Oct 9th 4:02:51 pm

May I know how you got 66.2?

Oct 9th 4:03:15 pm ✓ *C3: Ask student to justify their thought process*

Sorry!

Oct 9th 4:03:49 pm

I meant -2.2

Oct 9th 4:03:59 pm

Good! We are asked to round it to nearest degree.

Oct 9th 4:04:21 pm ✓ *Tutor is mindful student's given instructions*

So, the answer to nearest degree is?

Oct 9th 4:04:29 pm ✓ *C3: Invites student input*

-2 C

Oct 9th 4:04:30 pm

Very good!

Oct 9th 4:04:44 pm ✓ *C2: Encouraging language*

Thank you very much

Oct 9th 4:04:53 pm

You're welcome!

Oct 9th 4:05:00 pm

Byr

Oct 9th 4:05:07 pm

Bye

Oct 9th 4:05:10 pm

Please fill the survey form.

Oct 9th 4:05:19 pm

Thanks for using Yup!

Oct 9th 4:05:25 pm ✓ *Tutor thanks student for using Yup*

Have a good day ahead!

Oct 9th 4:05:32 pm ✓ *C2: Warm send-off*

Bye!

Oct 9th 4:05:34 pm

Student ended session

Oct 9th 4:05:38 pm