Mar 17th 12:05:47 pm

Nice to see you again. 😊 A tutor will be with you any moment.

Mar 17th 12:05:49 pm

TUTOR FOUND, NOW REVIEWING PROBLEM AT NO CHARGE

Mar 17th 12:05:54 pm

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

Mar 17th 12:06:14 pm ✓ *Introduction: Builds rapport with warm greeting*

SESSION STARTED AT 10:06 AM

Mar 17th 12:06:15 pm

I'm good how are you?

Mar 17th 12:06:34 pm

I am good too. Thanks! We need to find the value of x. right?

Mar 17th 12:06:53 pm ✓ *A1: Confirm understanding of the student's problem*

Yes

Mar 17th 12:07:03 pm

I've reviewed your problem. Let's work together so we can quickly figure out where you're stuck. Are you ready to begin now?
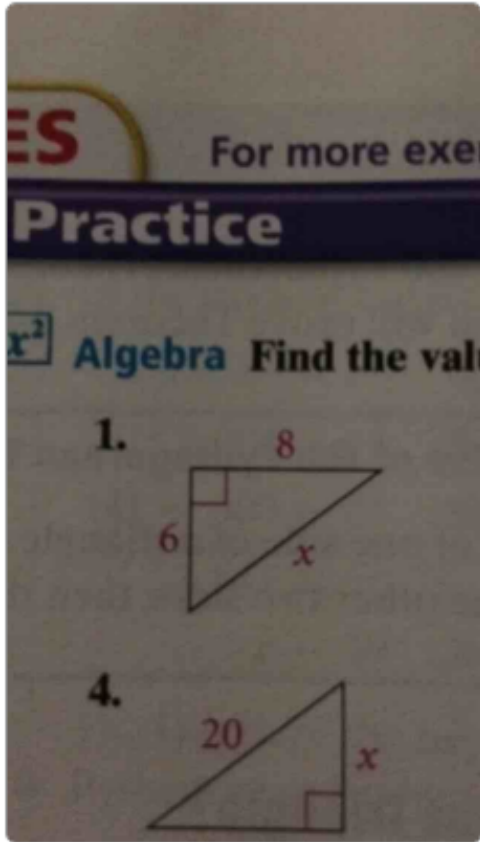
Mar 17th 12:07:08 pm

Yes

Mar 17th 12:07:20 pm

I'm going to ask you questions to help me figure out where you are stuck. That way we can solve your problem faster. The more you participate the quicker we will be able to get through this!

Mar 17th 12:07:23 pm

Ok

Mar 17th 12:07:37 pm

So, what have you tried so far on this problem?

It's the Pythagorean theorem so I wrote a squared plus B squared equals C squared

Mar 17th 12:07:59 pm

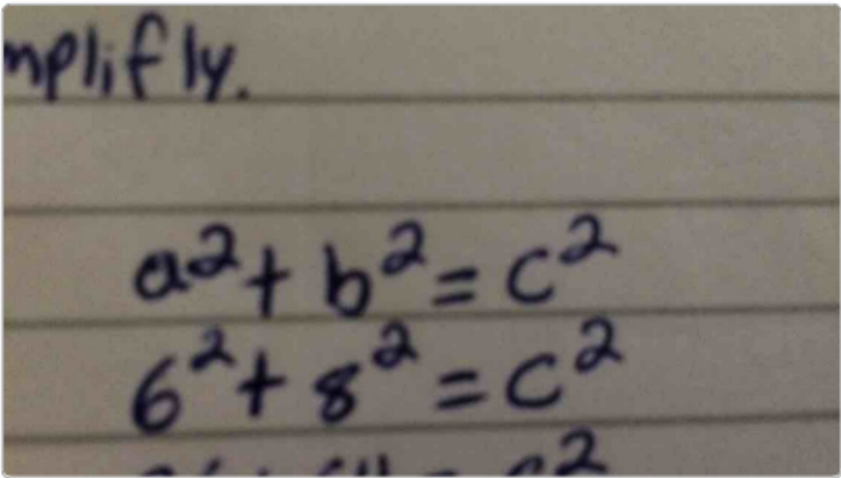Great start!

Mar 17th 12:08:09 pm

Thank you

Mar 17th 12:08:18 pm

So, what do we have so far?

Mar 17th 12:08:29 pm

Can I see the work?

Mar 17th 12:08:34 pm ✓ *A1: Determine starting point*

Mar 17th 12:09:51 pm

You are on the right track here. Good one!

Mar 17th 12:10:08 pm ✓ *C2: Encouraging language*

Thank you

Mar 17th 12:10:15 pm

So, where exactly did you got stuck?

Mar 17th 12:10:31 pm ✓ *A1: Probe student to determine knowledge gap*

I'm not sure if for the six squared you do 6×2 or 6×6

Mar 17th 12:10:58 pm

Oh, I see. No worries. Let's talk about it more.

Mar 17th 12:11:18 pm ✓ *C1: Adapt instruction to student gap*

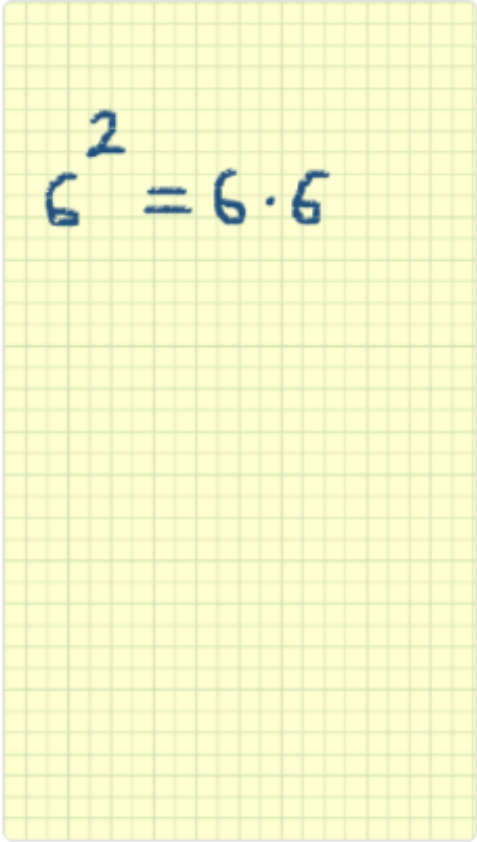6^2 means we are talking about 6 times 6.

Mar 17th 12:11:35 pm

That is: 6^2 = 6 x 6.

Mar 17th 12:11:46 pm

Ok

Mar 17th 12:12:33 pm
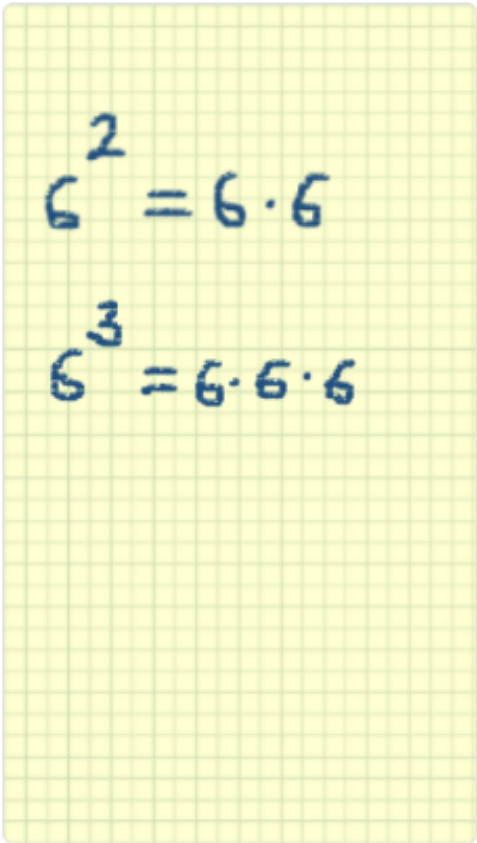
$$6^2 = 6 \cdot 6$$

Mar 17th 12:12:34 pm ✓ *B2: Uploaded images help the student visualize the example and follow along*

When we have 'exponent' like '2' here, it means we are multiplying that number that many times.

Mar 17th 12:13:08 pm ✓ *B2: Breaks down concept further*

Ok

Mar 17th 12:13:27 pm

$$6^2 = 6 \cdot 6$$

$$6^3 = 6 \cdot 6 \cdot 6$$

Mar 17th 12:13:40 pm

I just another image. As we can see there, 6^3 is 6 three times.

Mar 17th 12:13:54 pm

Which is different from 6 times 3. :)

Mar 17th 12:14:06 pm

Are we clear so far?

Mar 17th 12:14:17 pm ✓ *C1: Check with the student to ensure understanding*

Yes

Mar 17th 12:14:38 pm

Nice!

Mar 17th 12:14:53 pm

So, keep this fact about 'exponent' in mind. :)

Mar 17th 12:15:28 pm

Can you now solve for 'x' from what we have?

Mar 17th 12:15:54 pm

Mar 17th 12:16:33 pm

This is what I got

Mar 17th 12:16:38 pm

That looks correct.

Mar 17th 12:16:51 pm

Just that c=x here.

Mar 17th 12:17:04 pm ✓ *B2: Clarifies step further*

So, we should replace 'c' with 'x' in the work.

Mar 17th 12:17:16 pm

But that's not the Pythagorean theorem

Mar 17th 12:17:48 pm

Well, note that we put a=6 and b=8 in the theorem.

Mar 17th 12:18:09 pm

Similarly, the length of hypotenuse is x in this problem.

Mar 17th 12:18:28 pm

So, we take c = x in the a^2 + b^2 = c^2.

Mar 17th 12:18:51 pm

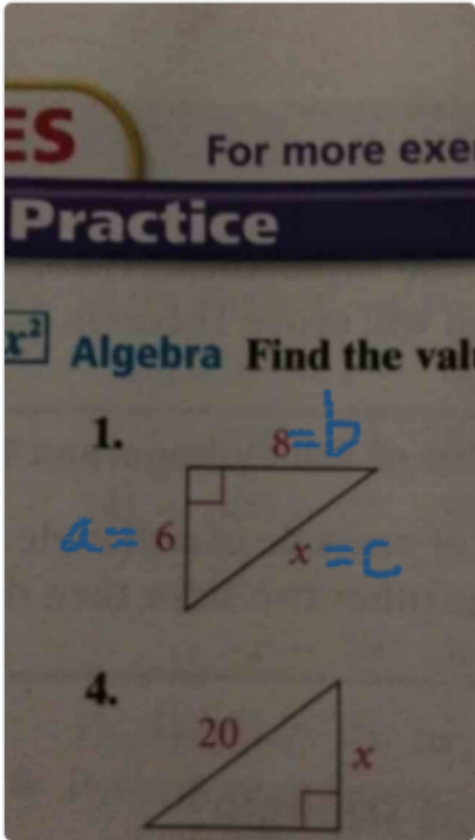Mar 17th 12:19:22 pm ✓ *B2: Uploads helpful information to supplement explanation*

Look at the last image I sent. Does that make sense?

Mar 17th 12:19:27 pm ✓ *C1: Check with the student to ensure understanding*

Oh OK I understand

Mar 17th 12:20:02 pm ✓ **B2: Uploaded images help the student visualize the problem and follow along**

Does it matter which Side a and B are

Mar 17th 12:20:26 pm

That's good to know. So, what should we do next after what we got so far?

Mar 17th 12:20:29 pm ✓ **C3: Invite student input**

Good question! Actually, it doesn't!

Mar 17th 12:20:48 pm

Ok :)

Mar 17th 12:21:06 pm

Because we are adding the squares and it doesn't matter what we take as 'a' and 'b'. Good work in noting that point.

Mar 17th 12:21:46 pm ✓ **B2: Explain rationale behind student's question**

So, we got 36 + 64 = x^2 and we want to solve for 'x'.

Mar 17th 12:22:11 pm

Do you know how to do that?

Mar 17th 12:22:25 pm ✓ **C3: Invite student to proceed independently**

It equals 100

Mar 17th 12:22:58 pm

What equals 100? x^2 or x?

Mar 17th 12:23:13 pm ✓ **C3: Tutor continues to pull information from the student**

36+64

Mar 17th 12:23:48 pm

That's correct. So, we got?

Mar 17th 12:23:58 pm ✓ **C3: Invite student input**

100=x

Mar 17th 12:24:15 pm

Ah, almost there! Good try, though.

Mar 17th 12:24:42 pm ✓ **C2: Acknowledge student's mistake without causing stress**

Note that we have squared term of the right-hand side

Mar 17th 12:24:56 pm

And we have, 36+64 =100 on the left-hand side.
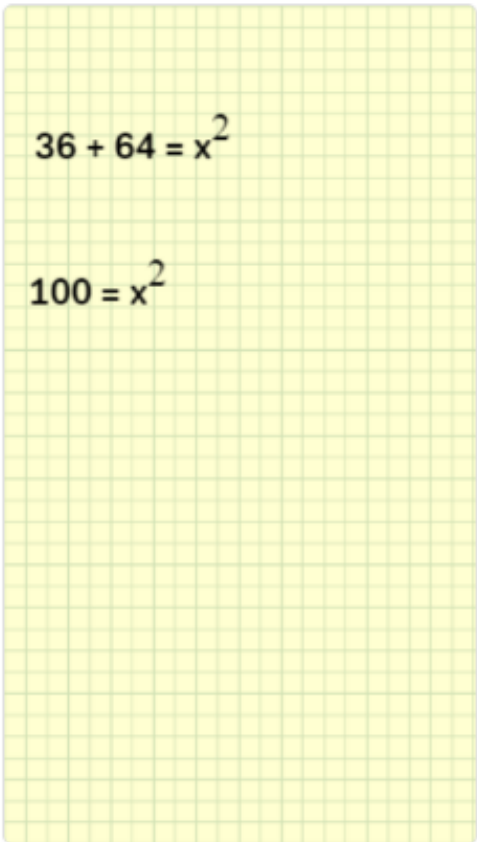
Mar 17th 12:25:10 pm

So, the right-hand side will not be x but x^2. Right?

Mar 17th 12:25:36 pm

✓ *C1: Adapts explanation to student's error*

Yes

Mar 17th 12:25:46 pm

$$36 + 64 = x^2$$

$$100 = x^2$$

Mar 17th 12:26:06 pm ✓ *B2: Uploaded images help the student visualize the problem and follow along*

Have a look at the last image I sent. Are we on the same page so far?

Mar 17th 12:26:26 pm ✓ *C1: Check with the student to ensure understanding*

Yes

Mar 17th 12:26:48 pm

Awesome!

Mar 17th 12:26:52 pm ✓ *C2: Positive language*

So, it's very important that we keep in mind that it's x^2 and not just 'x' on the right-hand side.

Mar 17th 12:27:21 pm ✓ *B2: Clarifies step further*

Otherwise, we would end up with wrong answer.

Mar 17th 12:27:38 pm

So, we got: x^2 = 100.

Mar 17th 12:27:52 pm

Can you solve for 'x' from x^2 = 100?

Mar 17th 12:28:00 pm ✓ *C3: Guides student towards correcting their own mistake*

We find the square root of 100

Mar 17th 12:28:28 pm

Exactly!

Mar 17th 12:28:40 pm ✓ *C2: Positive language*

You are absolutely correct here.

Mar 17th 12:28:51 pm

So, what will be the final answer for x?

Mar 17th 12:29:01 pm ✓ *C3: Invite student input*
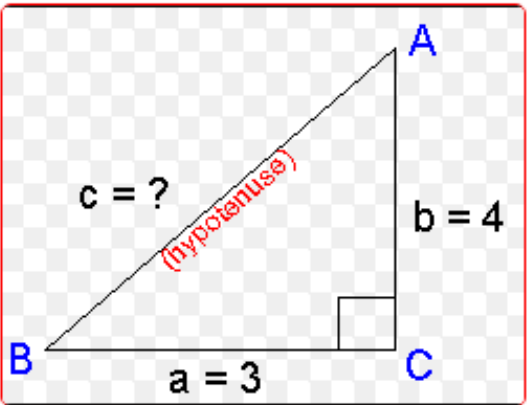
10

Mar 17th 12:29:10 pm

Wow! Awesome job :)

Mar 17th 12:29:22 pm ✓ *C2: Encouraging words / punctuation*

Is there anything unclear so far with the explanation?

Mar 17th 12:29:39 pm ✓ *C1: Check with the student to ensure understanding*

No that's all

Mar 17th 12:29:50 pm

$c = ?$
(hypotenuse)
$b = 4$
$a = 3$

Slowest response   Mar 17th 12:30:43 pm

Do you mind doing this similar example problem I just sent?

Mar 17th 12:31:01 pm ✓ *C1: Tutor provides CFU ("Check for Understanding") problem to confirm student understanding*

Ok

Mar 17th 12:31:14 pm

This is just ti make sure that you got the idea down well. :)

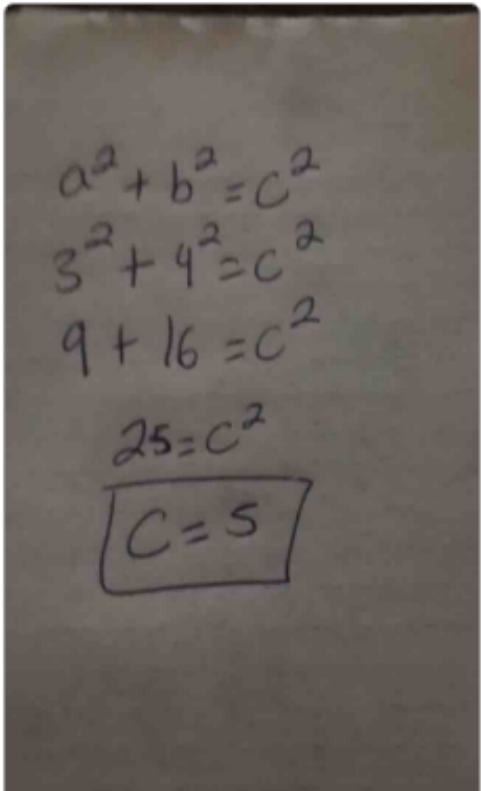Mar 17th 12:31:13 pm

Thanks! Let me know when you are done.

Mar 17th 12:31:32 pm

I am here only if you need any help.

Mar 17th 12:31:43 pm ✓ *C2: Reassuring language*

Is there any problem in solving the example I gave?

Mar 17th 12:34:14 pm ✓ *C1: Check with the student to see if they need help*

$a^2 + b^2 = c^2$
$3^2 + 4^2 = c^2$
$9 + 16 = c^2$
$25 = c^2$
$C = 5$

Mar 17th 12:34:30 pm

You're learning quickly!

Mar 17th 12:34:46 pm ✓ *C2: Positive language*

That's correct! Nice work :)

Mar 17th 12:34:48 pm

Thank you

Mar 17th 12:35:03 pm

Can I help you with anything else?

Mar 17th 12:35:09 pm ✓ *Tutor checks to make sure student doesn't need further help*

No that's all

Mar 17th 12:35:20 pm

It was fun solving these problems with you.

Mar 17th 12:35:38 pm ✓ *Conclusion: Warm send off*

Thanks for using Yup!

Mar 17th 12:35:45 pm ✓ *Conclusion: Tutor thanks student for using Yup*

Have a good one!

Mar 17th 12:35:49 pm

Thank you very much! Have a good day :)

Mar 17th 12:35:57 pm

Student ended session

Mar 17th 12:36:06 pm

✓ *C2: Positive language*

That's correct! Nice work :)