7. A rectangular yard is 18 feet long. The area of the yard is 400.5 square feet. What is the width of the yard? Explain.

_____

_____

8. Divide these identical trapezoids into different sets of figures. Use these figures to find the area of each trapezoid.

Show your work.

Trapezoid B

Mar 3rd 5:52:10 am

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

Mar 3rd 5:53:08 am

✓ *Introduction: Tutor greets student by name and introduces himself by last name*

Good thanks how are you ? :)

Mar 3rd 5:53:28 am

Good:)

Mar 3rd 5:53:33 am

This looks like an interesting problem. Let's work together to solve it quickly :) Are you ready to begin now?

Mar 3rd 5:53:48 am

Yes I am !

Mar 3rd 5:54:01 am

I am going to now ask you a couple questions about your understanding of the problem. This will help me know where you are stuck so we can get to the answer faster. The more information you provide the quicker we will be able to get through this!

Mar 3rd 5:54:07 am

Alright

Mar 3rd 5:54:22 am

Have you made any progress in solving this problem? If so, please share your work.

Mar 3rd 5:54:31 am

✓ *A1: Determine progress*

I'm trying to figure out how to find the width but I'm a little stuck !

Mar 3rd 5:56:05 am

No worries, let's try it together.

Mar 3rd 5:56:22 am

✓ *C2: Reassuring "us" language*

Okay

Mar 3rd 5:56:30 am

So, to begin with, can you explain what the problem is asking for?

Mar 3rd 5:56:40 am

✓ *A1: Confirm student's understanding of their problem*

It's asking me what Is the width of the yard

Mar 3rd 5:57:11 am

Correct! And what is known to us in the question?

Mar 3rd 5:57:23 am

It says that the yard is 18 ft long and the area is 400.5 sq ft

Mar 3rd 5:58:10 am

Yes, so the length and area of the yard is known.

Mar 3rd 5:58:24 am

What shape is the yard?

Mar 3rd 5:58:31 am

I'm quessing a rectangle?

Mar 3rd 5:58:49 am

Excellent! Yes, that is correct:)

Mar 3rd 5:58:59 am

Oh great !

Mar 3rd 5:59:14 am

Now, what is the formula for finding the area of a rectangle?

Mar 3rd 5:59:16 am

✓ *A1: Probe the student's understanding of concepts*

A = LW

Mar 3rd 5:59:39 am

Perfect! Can you suggest how we can use this formula to find the width?

Mar 3rd 5:59:58 am

✓ *C3: Invite student input*

We can multiply the area of the yard by the 18 ft?

Mar 3rd 6:00:29 am

Hmm..not quite. Let me explain using an example.

Mar 3rd 6:00:46 am
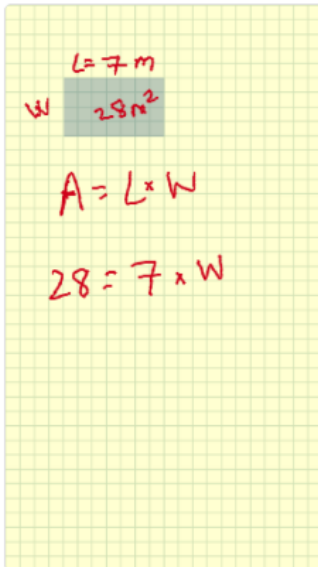
Please give me a moment to upload it.

Mar 3rd 6:00:54 am

Alright

Mar 3rd 6:01:01 am

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

L= 7 m

W   28 m²

A = L × W

28 = 7 × W

Mar 3rd 6:01:49 am   ✓ **B2: Presents a similar example to demonstrate concept**

In this example, the rectangle has a area of 28 m^2.

Mar 3rd 6:02:03 am

The length is given as 7 m.

Mar 3rd 6:02:10 am

We sub that in the formula for the area of a rectangle.

Mar 3rd 6:02:45 am

Is it clear till this step?

Mar 3rd 6:03:22 am   ✓ **C1: Check with the student to ensure understanding**

Yes

Mar 3rd 6:03:30 am

Can you tell me what the width of this rectangle will be?

Mar 3rd 6:03:44 am   ✓ **C3: Encourage student to take the next step**

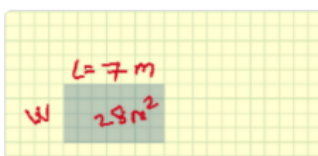still a bit confused on how to find the width

Mar 3rd 6:03:59 am

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

We solve for the 'w'.

Mar 3rd 6:04:08 am

Let me explain how.

Mar 3rd 6:04:13 am

L= 7 m

W   28 m²

$$A = L \times W$$

$$28 = 7 \times W$$

$$\frac{7W}{7} = \frac{28}{7}$$

$$W = 4m$$

Mar 3rd 6:04:42 am   ✓   *B2: Demonstrate concept using similar example*

To solve for the 'w', we need to isolate the 'w'.

Mar 3rd 6:05:13 am

To isolate the 'w', we do the opposite of the math operations that have been done on it.

Mar 3rd 6:05:28 am

Like in this case, the 7 and w are multiplied, so we do the opposite, ie divide both sides by 7.

Mar 3rd 6:05:49 am

We get w=4 m.

Mar 3rd 6:05:57 am

So would the width equal 22.25 ?

Mar 3rd 6:07:07 am

Can you explain how you found that?

Mar 3rd 6:07:23 am   ✓   *C3: Ask student to justify their thought process*

Well I multiplied 22.25 by 18 and got 400.5 but I'm pretty sure that's wrong

Mar 3rd 6:08:14 am

I mean, can you explain how you got that 22.25. (What you said just now is correct! But, can you explain the 22.25?)

Mar 3rd 6:09:01 am

I divided 400.5 and 18 which gave me the 22.25

Mar 3rd 6:11:04 am

Excellent! Yes, you got it right:)

Mar 3rd 6:11:15 am   ✓   *C2: Positive language*

Alright thank you so much! ☺

Mar 3rd 6:11:30 am

Just to recap, can you summarize how we ended up solving that problem?

Mar 3rd 6:11:35 am   ✓   *C1: Invites student recap to ensure understanding*

I had to find the width of the rectangle by using A = LW & I know that the length was 18 and the total area of the field which was 400.5 so I had to join (W) which is the variable/width and 18 together which gave me 18W & I had to isolate the variable and divide 400.5 and 18 together which gave me the total width of 22.25ft 2

Mar 3rd 6:15:06 am

Good:)

Mar 3rd 6:15:17 am

Just to clarify, what is the unit of width?

Mar 3rd 6:15:32 am ✓ *B1: Addresses student error*

I see ft 2? Can you explain that please?

Mar 3rd 6:16:09 am

Oh sorry I did not mean to put the 2 just now

Mar 3rd 6:16:58 am

Then it's fine:)

Mar 3rd 6:17:05 am

Are there any more problems you need help with?

Mar 3rd 6:17:07 am ✓ *Tutor checks to see if the student needs further help*

No I am all good thanks !

Mar 3rd 6:18:07 am

You are welcome. Thank you for using Yup! Bye :)

Mar 3rd 6:18:16 am ✓ *Conclusion: Tutor thanks student for using Yup*

Student ended session

Mar 3rd 6:18:22 am