

# Tutoring Session Evaluation

## Original Conversation

tutor: Hello Michelle! I'm here to help you with your studies.

tutor: Let's discuss the 2. Johnny has a 3 sticks. Stick A is 2 inches. Stick B is 4 inches. Stick C is 8 inches. He combines sticks A and B to make the length of a rectangle and stick C to be the width. What is the area?.

user: Hello

tutor: Hello! ■ I see you're working on a math problem about rectangles. What can I help you with? ■

user: Where do I start with this

tutor: That's a great question! The first thing you want to figure out is what shapes are being made here. Do you see how Johnny could use his sticks to make a rectangle? ■■

Think about the definition of a rectangle – it has four sides and four right angles (they look like corner pieces of a square!). ■

user: How could he use the sticks?

tutor: That's a good start! Think about how you can lay those sticks out to make a shape with four straight sides and four corners that look like perfect squares. ■

Remember, a rectangle needs to have all of its corners looking just like those square corner pieces. ■

user: I can put sticks a and b together

tutor: That's great! ■ Now that you have those two sticks together, what would be the total length of them? Remember, we need to find the \*length\* of the rectangle Johnny made. ■

user: Is it 8

tutor: That's a great guess! Remember, the area is how much space is \*inside\* the rectangle. To figure that out, we need to think about both how long and wide the rectangle is. Think about multiplying the length and the width together – could that help us find the area? ■

user: Is the length 8

tutor: That's a good try! Remember, we need to add up the lengths of Stick A and Stick B to find the total length of the rectangle. ■ Do you remember what those lengths are?

user: Is it 6

tutor: You got it! ■ That's exactly right. The length of the rectangle is 6 inches because we added together the lengths of Stick A and Stick B. Now that you know the length, think about how to find the area – remember, it's like measuring the space inside the rectangle. ■ Do you remember what else we need to know? ■

user: I don't know

tutor: That's okay! Let's break it down step-by-step. Remember, we already figured out that the length of the rectangle is 6 inches (Stick A plus Stick B). Now we need to think about how wide the rectangle is. ■ What did we use for the width?

user: Stick c

tutor: You got it! ■ Stick C is 8 inches long, and that's going to be our width for the rectangle. Now we know both the length and the width – remember how those work together to find the area? ■ What do we need to do next? ■

user: I don't know

tutor: Let's break it down a bit more. Remember, we found that the length of the rectangle is 6 inches. And we also know that Stick C, which is 8 inches long, is the width of our rectangle.

Think about what we do when we want to find the amount of space inside a rectangle – it's like building a small box with those sticks! What mathematical operation helps us find the amount of space inside that box? ■

user: multiplication.

tutor: You got it! Multiplication is exactly what we need to find the area of a rectangle. Remember, length times width equals the area. ■ So, let's use our numbers – we know the length is 6 inches and the width is 8 inches. Can you multiply those together for me? ■

user: 48

tutor: That's fantastic! ■ You figured it out! Remember how we multiplied the length and width together to find the area? ■ Did you picture those sticks inside the rectangle – that's how much space they take up!

## Evaluation

### **## Assessment of Michelle's Performance:**

#### **\*\*Weaknesses:\*\***

\* **\*\*Struggles with conceptual understanding:\*\*** Michelle seems to have difficulty grasping the relationship between length, width, and area. While she can identify individual stick lengths, applying these to find the rectangle's dimensions and ultimately the area requires further clarification and practice.

\* **\*\*Needs guidance in problem-solving steps:\*\*** Michelle often asks "Where do I start?" or "I don't know" indicating a need for more explicit guidance on how to approach the problem step-by-step. She relies heavily on leading questions from the tutor rather than independently identifying next steps.

#### **\*\*Strengths:\*\***

\* **\*\*Willingness to participate:\*\*** Michelle actively engages in the conversation and responds to the tutor's questions, showing a willingness to learn.

\* **\*\*Able to recall basic information:\*\*** When prompted, she can recall the lengths of the sticks and eventually remembers that multiplication is used to find the area.

#### **\*\*Areas for Strengthening:\*\***

\* **\*\*Communication:\*\*** Michelle could benefit from expressing her thought process more clearly, even if she's unsure. This allows the tutor to better understand her understanding and provide targeted support.

\* **\*\*Active problem-solving:\*\*** Michelle needs to develop strategies for breaking down problems into smaller steps and identifying what information is needed to solve each step.

### **## Tips for Improvement:**

1. **Visual aids:** Use drawings or manipulatives (like blocks) to represent the sticks and the rectangle they form. This will help Michelle visualize the problem and understand the relationship between length, width, and area.
2. **Guided practice:** Work through similar problems together, breaking down each step explicitly. Encourage Michelle to verbalize her thought process as you work through the steps.
3. **Sentence starters:** Provide Michelle with sentence starters to help her communicate her thinking. For example: "I know that...", "I'm not sure how to...", "My next step is to..."
4. **Real-world connections:** Relate the problem to real-life scenarios, like finding the area of a classroom or a garden patch. This can make the concept more relatable and engaging for Michelle.

By incorporating these tips into future tutoring sessions, Michelle can develop a stronger understanding of geometric concepts and improve her problem-solving skills.