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: Hi Michelle! Ready to tackle some math problems today? Let's see what we can figure out

together! ■

user: Alright

tutor: That's great, Michelle! So, let's take a look at this problem together.

What do you think we need to know first to figure out the area of Johnny's rectangle?

user: The width is important

tutor: That's right, Michelle! The width is super important when we're figuring out the area of a rectangle. Why do you think that is? ■

What other pieces of information do you think we need to know about Johnny's sticks to calculate the area? Remember, the area is like the size of the whole rectangular space he creates.

user: How long the rectangle is.

tutor: You're absolutely right, Michelle! Knowing the length of the rectangle is a key part of figuring out the area.

To find the length, think about how Johnny put his sticks together to make the rectangle. Remember, he combined which two sticks? ■

Let me know what you come up with for the length, and then we can figure out the width!

user: I got it. So stick a is 2 inches and stick c is 8 inches so the area is 16

tutor: That's great that you recognize those measurements, Michelle! Remember though, we need to consider both the length and width of the rectangle when calculating the area. You're on the right track with using stick C for the width, but what about the length? ■ Think back to how Johnny combined his sticks to make the rectangle. Which two sticks did he use for its length?

Remember, "The only easy day was yesterday." - Navy SEALs ■ This problem might seem a little tricky at first, but with a bit of focus and thought, you can totally crack it!

user: We combine them and make the length 6

tutor: That's fantastic, Michelle! You got the length exactly right! ■

Now that you have both the length and the width, remember our formula for finding the area of a rectangle?

It's **Area = Length x Width**. Let's plug in what we know:

Can you tell me what the area would be using those measurements? I believe in you! "The only way to achieve the impossible is to believe it is possible." - Charles Kingsleigh ■

user: $6 \times 8 = 48$

tutor: You got it, Michelle! ■ You successfully calculated the area! ■ Remember, practice makes perfect, and you're definitely on your way to mastering these math skills. "I am not a product of my circumstances. I am a product of my decisions." - Stephen Covey Keep that in mind – your choices and effort shape your success in learning!

Evaluation

Assessment of Michelle's Performance:

- **Weaknesses:**
- * **Initial understanding of area:** While Michelle identified the width as important, she initially struggled to connect it to the concept of a rectangle's size.
- * **Problem-solving steps:** Michelle needed prompting throughout the session to consider individual steps like identifying the length and applying the formula.
- **Strengths:**
- * **Engagement:** Michelle actively participated in the conversation and responded to questions.
- * **Recognizing key information:** Once guided, Michelle was able to identify stick A and B for the length and stick C for the width.
- * **Calculating correctly:** Michelle successfully used the formula "Area = Length x Width" to arrive at the correct answer.
- **Areas for Improvement:**
- * **Thinking critically about math problems:** Michelle needs to develop her ability to analyze a problem independently and determine the necessary steps before being prompted.
- * **Verbalizing thought processes:** While Michelle provided answers, expressing her reasoning and thought process aloud would improve understanding and learning.
- * **Confidence in mathematical abilities:** Despite initial struggles, Michelle responded positively to encouragement, indicating potential for growth with increased confidence.

Tips for Improvement:

- 1. **Visualize the problem:** Encourage Michelle to draw a simple rectangle and label it with the given stick lengths before attempting calculations. This visual representation can aid understanding.
- 2. **Break down problems into smaller steps:** Guide Michelle through each step, starting with identifying the known information, then defining what needs to be calculated, and finally applying the formula.
- 3. **Practice word problem strategies:** Introduce specific strategies for approaching word problems, such as highlighting key words or creating a simple diagram.
- 4. **Encourage self-talk:** Encourage Michelle to verbalize her thoughts and reasoning while solving problems, even if she's unsure. This helps build confidence and clarify thinking.
- 5. **Celebrate successes:** Acknowledge and praise Michelle's efforts and achievements, reinforcing positive learning experiences.

By incorporating these tips, Michelle can develop a stronger foundation in problem-solving skills and build confidence in her mathematical abilities.