

# 50 Leveled 4b Droble

Interactive Whiteboard-Compatible CD



# Math Problems



UNIVERSITY

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## Which One?

### Standards

- Multiplies whole numbers
- Understands the basic measures of area

### **Overview**

These problems require students to find the area of objects given their length measures. The goal is to find the object that matches the given criteria.

### **Problem-Solving Strategies**

- Find information in a picture, list, table, graph, or diagram
- Count, compute, or write an equation
- Guess and check or make an estimate

### **Materials**

- Which One? (page 109; whichone.pdf)
- graph paper
- Student Response Form (page 132; studentresponse.pdf) (optional)

### **Activate**

- **1.** Ask students what they know about *area*. Allow several students to respond.
- **2.** If no one refers to finding the area of a rectangle, ask Who can tell me something about finding the area of a rectangle?
- 3. Draw a rectangle and label the length 6 ft. and the width 2 ft. Point to the sides that are not labeled and ask students to identify the lengths. Then, ask students what the area of this rectangle is. Make sure students respond 12 square feet rather than just 12. If necessary, remind them that a measurement requires a number and a unit.

### Solve

- 1. Distribute copies of Which One? to students. Have students work alone, in pairs, or in small groups.
- 2. Observe students as they work. Do they readily compute the areas of the figures? Does their number sense allow them to eliminate some possibilities without finding their areas?

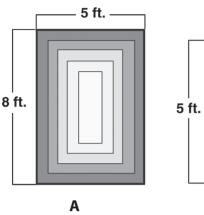
### Debrief

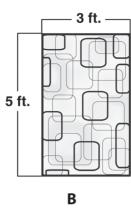
- 1. What strategies did you use to find the answer?
- **2.** Did you always use the clues in order? Why or why not?
- 3. Did you check each area? Why or why not?

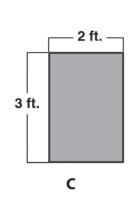
### Differentiate $\bigcirc$ $\square$ $\triangle$ $\Rightarrow$

Distribute graph paper to students who prefer a more concrete approach to finding areas. When needed, they can draw the figure and count the squares. Make sure students who rely on the formula remember why it works. Ask What could you show someone who does not understand why the formula for finding the area of a rectangle works?

Harry bought a rug that has an area of 24 square feet. Which rug did Harry buy?

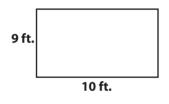




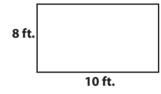


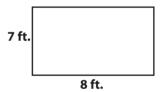


The area of Sally's bedroom is greater than 72 square feet. The area of the room is not 80 square feet. Which drawing below represents Sally's bedroom?



9 ft.





Α

В

C

D

The area of Madelyn's picture is 124 square inches greater than the area of Ben's picture. Which pictures did Madelyn and Ben draw?

