## UNIT 1 • RELATIONSHIPS BETWEEN QUANTITIES AND EXPRESSIONS

## Lesson 3: Interpreting Formulas and Expressions

## Problem-Based Task 1.3.3: Architectural Area

An architect is creating a template, or reusable pattern, of the design of a bathroom. One part of the bathroom has a standard size in order to fit a standard bathtub, and one part of the bathroom can vary based on what the customer wants. The architect's template is shown, and all units are in inches. The formula for finding the area of a rectangle is $A=l w$, or in this case, $A=a b$. Find an expression to determine the total area of the

SMP
$1 \checkmark 2$
$34 \checkmark$
56
78 bathroom for any value of $x$.


