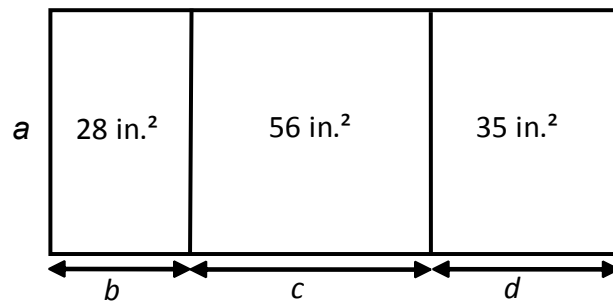


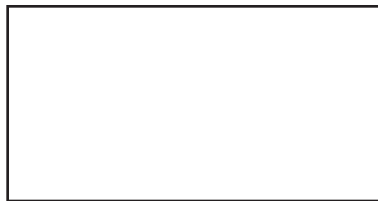
39. Dimension Detective

Name: _____

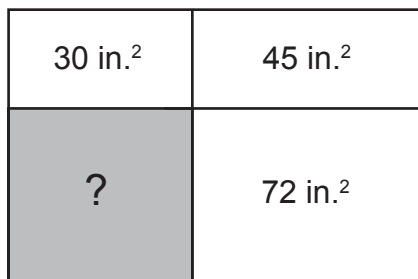
1. The rectangle areas are given. The lengths a , b , c , and d are whole numbers, and a is greater than 1. Determine the values of a , b , c , and d .



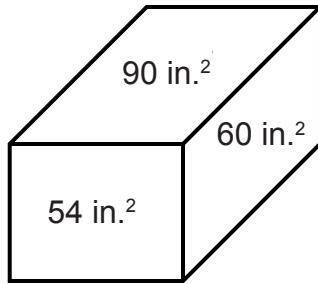
2. For what whole number values of length and width will the rectangle have an area of 60 square yards and a perimeter of 38 yards?



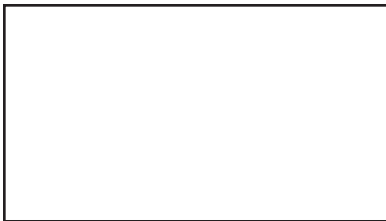
3. The area of each unshaded rectangle is given. What is the area of the shaded rectangle?



4. The areas of the rectangular faces of the box are shown. What is the volume of the box?



5. A rectangle has an area of 48 square yards. For what whole number values of length and width will the rectangle have the smallest perimeter?



Math Facts

1. The set of whole numbers is $\{0, 1, 2, 3, 4, 5, \dots\}$.
2. The area of a rectangle of length L and width W is $L \cdot W$.
3. The perimeter of a rectangle of length L and width W is $2 \cdot L + 2 \cdot W$.
4. The volume of a box of length L , width W , and height H is $L \cdot W \cdot H$.