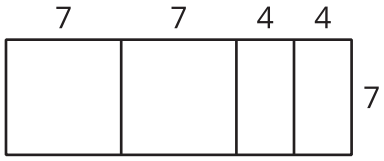
Unit 7, Lesson 3

Lots of Rectangles

Let's express the areas of some rectangles.

3.1 Many Ways to Area

A rectangle is partitioned into smaller rectangles. Explain why each of these expressions represents the area of the entire rectangle.



1. $7(7 + 7 + 4 + 4)$

2. $7(2 \cdot 7 + 2 \cdot 4)$

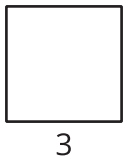
3. $7^2 + 7^2 + 4 \cdot 7 + 4 \cdot 7$

4. $2(7^2) + 2(4 \cdot 7)$

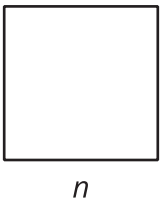
3.2 Representing Areas

Match each figure with one or more expressions for its area. Every shape that looks like a square is a square.

A



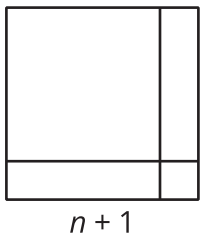
B



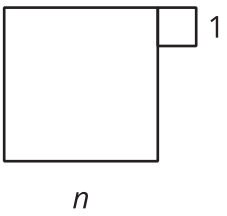
C



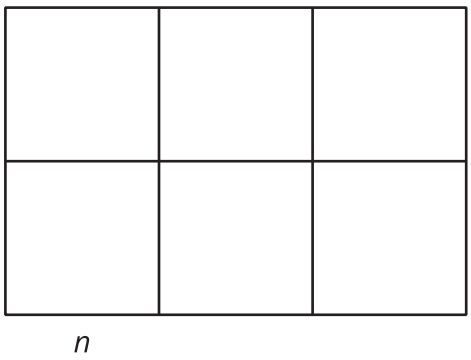
D



E



F

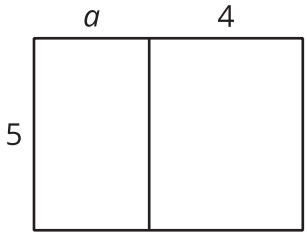


- $2 \cdot 3^2$
- $6n^2$
- $n^2 + 1^2$
- 3^2
- $(n+1)(n+1)$
- $(2n)(3n)$
- $(n+1)^2$
- $3(3+3)$
- n^2
- $(n+n)(n+n+n)$
- $3^2 + 3^2$

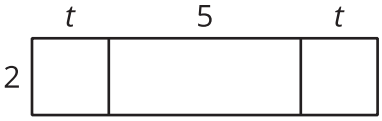
3.3 Areas of Rectangles

Complete the table with the length, width, and area of each rectangle.

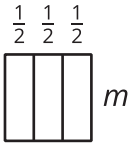
A



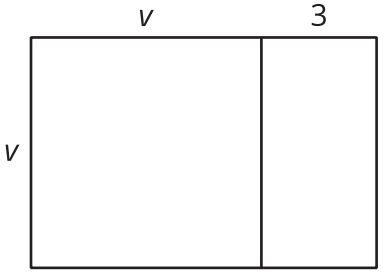
B



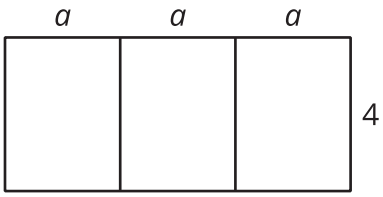
C



D



E



rectangle	length (units)	width (units)	area (square units)
A	$a+4$		
B		2	
C			
D			
E			