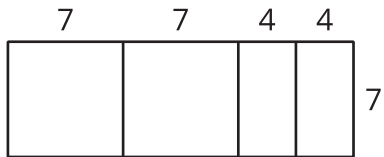# Unit 6 Lesson 3: Lots of Rectangles

1 Math Talk: Many Ways to Area (Warm up)

Student Task Statement

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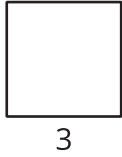

$7(7 + 7 + 4 + 4)$

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

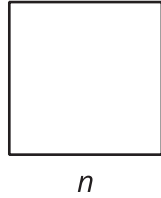$7^2 + 7^2 + 4 \cdot 7 + 4 \cdot 7$

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

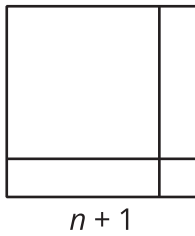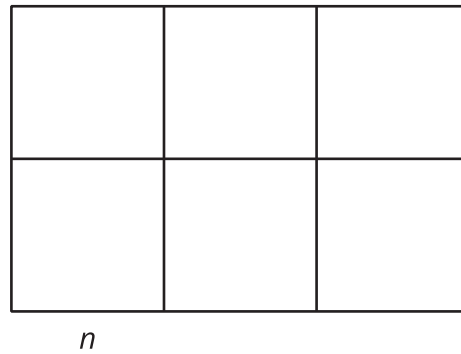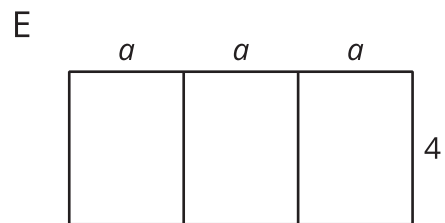## 2 Representing Areas

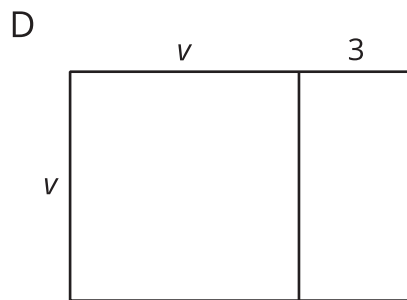**Student Task Statement**
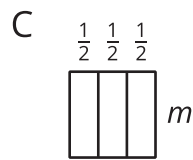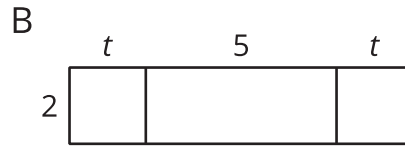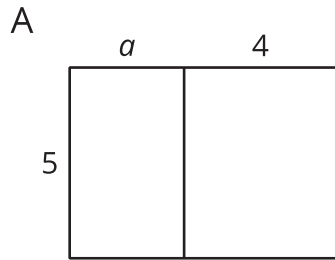
A

B

C

D

E
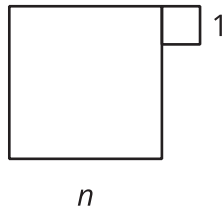
F

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

- $2 \cdot 3^2$

- $6n^2$

- $n^2 + 1^2$

- 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 Areas of Rectangles

Student Task Statement

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

A

a 4

5

B

t 5 t

2

C

$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$

m

D

v 3

v

E

a a a

4

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