MATH TODAY

3rd Grade Math

Module 4: Multiplication and Area
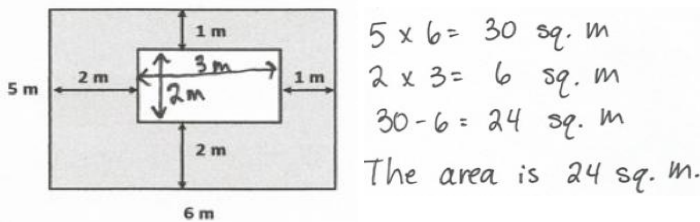
Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in the Engage New York material which is taught in the classroom. Module 4 of Engage New York covers understanding concepts of area and relating area to multiplication and addition. This newsletter will discuss Module 4, Topic D.

Topic D: Applications of Area Using Side Lengths of Figures

Vocabulary Words

- area
- area model
- decompose
- unknown group size
- unknown product
- length
- square unit
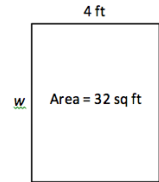- unit square
- unknown number of groups

The figure below shows a small rectangle in a big rectangle. Find the area of the shaded part of the figure.
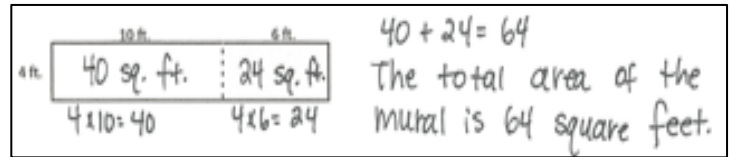

$5 \times 6 = 30$ sq. m
$2 \times 3 = 6$ sq. m
$30 - 6 = 24$ sq. m
The area is 24 sq. m.

Home and School Connection Activities:

1 Create and solve word problems involving area.

2 Find areas by decomposing into rectangles or completing composite figures to form rectangles.

3 Apply knowledge of area to determine areas of rooms in your home.

Focus Area– Topic D

Applications of Area Using Side Lengths of Figures

How can we find the value of w?
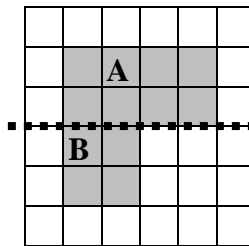$32 \div 4 = w$
The value of w is 8 feet.

An artist paints a 4 x 16 foot mural on a wall. What is the total area of the mural? Use the break apart and distributive strategy.
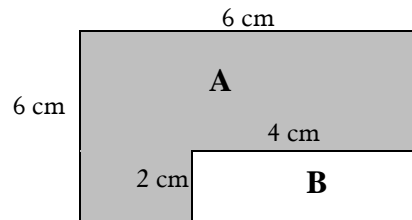

$40 + 24 = 64$
The total area of the mural is 64 square feet.

There is more than one way to find the unknown area

1. Break Apart Strategy
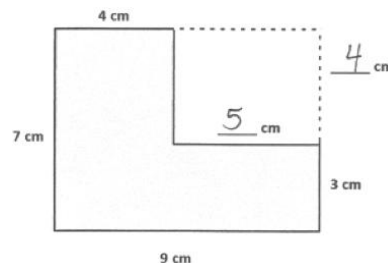

Area A + Area B = Area of Figure
$(2 \times 4) + (2 \times 2) = 8 + 4 = 12$ sq. units

2. Subtract to Find Area

Area of Figure – Area B = Area A
$(6 \times 6) – (4 \times 2) = 36 – 8 = 28$ sq. cm

3. Subtract to find Area with Missing Sides

Label the missing sides.
Big rectangle
$(7 \times 9) = 63$ sq. cm.
Small rectangle
$(4 \times 5) = 20$ sq. cm.
Shaded region
$63 – 20 = 43$ sq. cm.