MATH NEWS

Grade 3, Module 4, Topic D (Lessons 12-16)

3rd Grade Math

Module 4: Multiplication and Area

Math Parent Letter

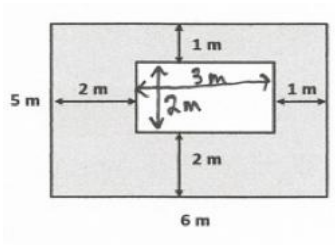
This document gives parents and students a better understanding of the Eureka math concepts that are taught in the classroom. Module 4 of Eureka Math covers understanding concepts of area and relating area to multiplication and addition. This newsletter will discuss Module 4, Topic D (Lessons 12-16).

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 x 6 = 30 sq. m
2 x 3 = 6 sq. m
30 - 6 = 24 sq. m
The area is 24 sq. m.

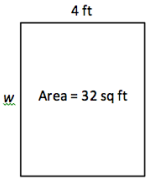
Objective of Topic D

1. 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 a given floor plan.

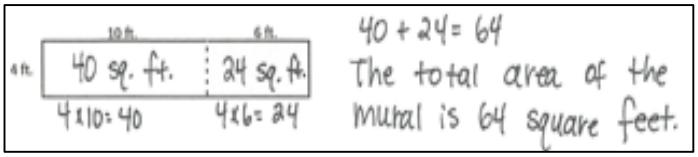
Focus Area– Topic D

Applications of Area Using Side Lengths of Figures

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

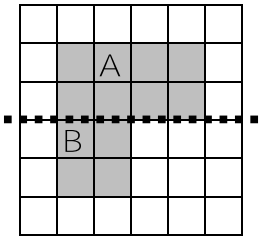


An artist paints a 4 x 16 foot mural on a wall. What is the total area of the mural? Use the break apart and distributive strategy.



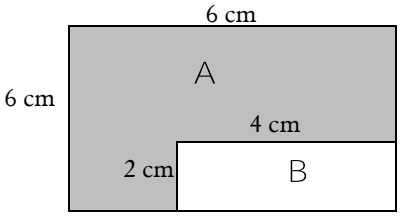
There is more than one way to find the unknown area

1. Break Apart Strategy



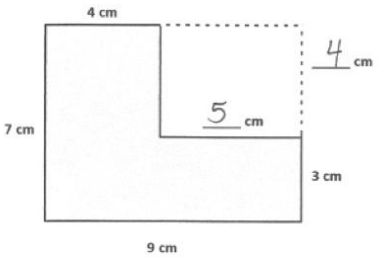
Area A + Area B = Area of Figure
(2 x 4) + (2 x 2) = 8 + 4 = 12 sq. units

2. Subtract to Find Area



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

3. Subtract to find Area with Missing Sides



Label the missing sides.
Big rectangle
(7x9) = 63 sq. cm.
Small rectangle
(4 x 5) = 20 sq. cm.
Shaded region
63 – 20 = 43 sq. cm.