

SECTION
10A

Ready to Go On? Skills Intervention

10-3 Area of Parallelograms

Area is the number of square units needed to cover a figure. The area of a rectangle can be found using the formula $A = \ell w$ and the area of a parallelogram can be found using $A = bh$.

Vocabulary
area

Finding the Area of a Rectangle

Find the area of the rectangle.

What is the length of the rectangle? _____

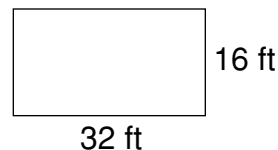
What is the width of the rectangle? _____

What is the formula for the area of a rectangle? _____

$A = (32)(\text{_____})$ Substitute into the formula.

$A = \text{_____} \text{ ft}^2$

The area of the rectangle is _____ ft^2 .



Finding the Area of a Parallelogram

Find the area of the parallelogram.

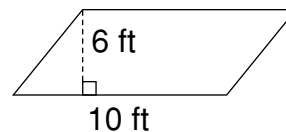
What is the base length of the parallelogram? _____

What is the height of the parallelogram? _____

What is the formula for the area of a parallelogram? _____

$A = (\text{_____})(\text{_____})$ Substitute _____ for the base
and _____ for the height.

$A = \text{_____}$



Measurement Application

Jonathon is using 4 by 8 sheets of plywood to roof his new barn.

The barn roof is 50 feet long and 17 feet wide. How many sheets of plywood will he need to complete the roof?

How do you find the area of the barn roof? _____

What is the length of the roof? _____ What is the width? _____

$A = (\text{_____})(\text{_____})$ Substitute _____ for the length and _____
for the width.

$A = \text{_____}$ Multiply.

_____ $\div 32 = \text{_____}$ _____ the area of the roof by the _____ of
one sheet.

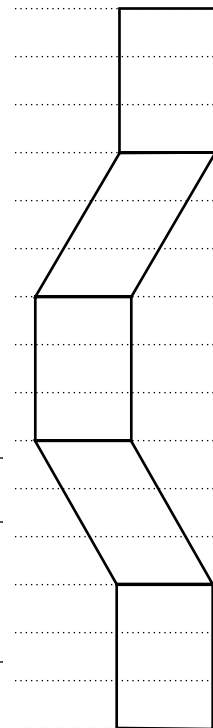
Jonathon will need at least _____ sheets of plywood to complete the roof.

SECTION 10A

Ready to Go On? Problem Solving Intervention

10-3 Area of Parallelograms

The figure shown is made of 3 rectangles and 2 other parallelograms. The dotted lines are parallel and $\frac{1}{4}$ of an inch apart. Each rectangle is $\frac{1}{2}$ of an inch wide. What is the area of the figure?



Understand the Problem

1. What formula can you use to find the area of a rectangle? A parallelogram?

2. What are the dimensions of each rectangle?

Make a Plan

3. How can you find the base and height of the parallelograms?

Solve

4. What is the area of each rectangle? Of each parallelogram?

5. What is the total area of the 3 rectangles and 2 parallelograms?

Check

6. Think of the figure straightened into one long rectangle, $\frac{1}{4}$ in. wide and 15 spaces long. Estimate the area.
